

INDIANA UPLANDS

PARK, RECREATION, AND PROTECTED LAND INVENTORY AND OPPORTUNITY MAPPING

APRIL 2019



CENTER FOR
RURAL ENGAGEMENT


Institute for Parks and Public Lands
INDIANA UNIVERSITY

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TABLE OF CONTENTS

| | |
|--|-----------|
| TABLE OF FIGURES | iv |
| TABLE OF TABLES | v |
| INTRODUCTION | 1 |
| STUDY PURPOSE | 2 |
| BACKGROUND | 3 |
| ECONOMIC OVERVIEW OF THE INDIANA UPLANDS | 5 |
| HEALTH IN THE INDIANA UPLANDS | 5 |
| METHODS | 6 |
| RESEARCH | 7 |
| Identification of Conservation and Recreation Areas, Facilities, and Programming | 7 |
| Benchmark Analysis | 8 |
| CIVIC ENGAGEMENT | 9 |
| Focus Group Measures | 9 |
| Focus Group Participants | 9 |
| Data Collection | 10 |
| Data Analysis | 10 |
| FINDINGS | 11 |
| PUBLIC, NON-PROFIT, AND PRIVATE CONSERVATION AND RECREATION AREAS | 11 |
| Indiana Uplands Region | 11 |
| Brown County | 14 |
| Crawford County | 15 |
| Daviess County | 15 |
| Dubois County | 15 |
| Greene County | 16 |
| Lawrence County | 16 |
| Martin County | 16 |
| Monroe County | 17 |
| Orange County | 17 |
| Owen County | 17 |
| Washington County | 18 |
| TRAILS | 19 |
| Indiana Uplands Region | 19 |
| Brown County | 21 |
| Crawford County | 21 |
| Daviess County | 21 |
| Dubois County | 21 |
| Greene County | 22 |
| Lawrence County | 22 |
| Martin County | 22 |
| Monroe County | 22 |
| Orange County | 22 |
| Owen County | 22 |
| Washington County | 22 |
| RECREATION AND TOURISM FACILITIES | 23 |
| Indiana Uplands Region | 23 |
| Brown County | 26 |

| | |
|---|-----------|
| Crawford County | 27 |
| Daviess County | 28 |
| Dubois County | 29 |
| Greene County | 30 |
| Lawrence County | 31 |
| Martin County | 32 |
| Monroe County | 33 |
| Orange County | 34 |
| Owen County | 35 |
| Washington County | 36 |
| RECREATION AND TOURISM PROGRAMMING | 37 |
| Indiana Uplands Region | 37 |
| Brown County | 38 |
| Crawford County | 39 |
| Daviess County | 39 |
| Dubois County | 39 |
| Greene County | 39 |
| Lawrence County | 39 |
| Martin County | 39 |
| Monroe County | 40 |
| Orange County | 40 |
| Owen County | 40 |
| Washington County | 40 |
| BENCHMARK ANALYSIS | 40 |
| Access to Recreation Facilities | 42 |
| Tourism Presence | 42 |
| Summary of Benchmark Findings | 43 |
| CIVIC ENGAGEMENT | 44 |
| Use of Resources, Facilities, and Programming | 44 |
| Factors Contributing to Use of Resources, Facilities, and Programming | 45 |
| Barriers to Use of Resources, Facilities, and Programming | 48 |
| Community Needs | 52 |
| Health Opportunities | 54 |
| Tourism Opportunities | 55 |
| Partnership Opportunities | 60 |
| RECOMMENDATIONS | 61 |
| REFERENCES | 70 |
| APPENDICES | 74 |
| APPENDIX A: COMPREHENSIVE DESCRIPTION OF THE STUDY METHODS | 74 |
| Methods | 74 |
| APPENDIX B: COUNTY GIS WEBPAGES | 80 |
| APPENDIX C: RECREATION FACILITIES SEARCH TERMS | 81 |
| APPENDIX D: RECREATION FACILITIES CATEGORIZATION FRAMEWORK | 83 |
| APPENDIX E: FOCUS GROUP QUESTIONS | 87 |

TABLE OF FIGURES

| | |
|--|----|
| <i>Figure 1. Indiana Uplands region.</i> | 3 |
| <i>Figure 2. Map of public, non-profit, and private conservation and recreation areas in the Indiana Uplands region.</i> | 12 |
| <i>Figure 3. Percent of public, non-profit, and private conservation and recreation area acres in each county.</i> | 13 |
| <i>Figure 4. Percent of conservation and recreation acres by management type.</i> | 14 |
| <i>Figure 5. Map of trails and railroads in the Indiana Uplands region.</i> | 19 |
| <i>Figure 6. Percent of trails in each county of the Indiana Uplands.</i> | 20 |
| <i>Figure 7. Percent of trail mileage in each county of the Indiana Uplands.</i> | 20 |
| <i>Figure 8. Map of recreation and tourism facilities in the Indiana Uplands region.</i> | 24 |
| <i>Figure 9. Percent of recreation and tourism facilities in each county of the Indiana Uplands.</i> | 25 |
| <i>Figure 10. Percent of recreation and tourism facility types in the Indiana Uplands region.</i> | 25 |
| <i>Figure 11. Percent of recreation and tourism facility types in Brown County.</i> | 26 |
| <i>Figure 12. Percent of recreation and tourism facility types in Crawford County.</i> | 27 |
| <i>Figure 13. Percent of recreation and tourism facility types in Daviess County.</i> | 28 |
| <i>Figure 14. Percent of recreation and tourism facility types in Dubois County.</i> | 29 |
| <i>Figure 15. Percent of recreation and tourism facility types in Greene County.</i> | 30 |
| <i>Figure 16. Percent of recreation and tourism facility types in Lawrence County.</i> | 31 |
| <i>Figure 17. Percent of recreation and tourism facility types in Martin County.</i> | 32 |
| <i>Figure 18. Percent of recreation and tourism facility types in Monroe County.</i> | 33 |
| <i>Figure 19. Percent of recreation and tourism facility types in Orange County.</i> | 34 |
| <i>Figure 20. Percent of recreation and tourism facility types in Owen County.</i> | 35 |
| <i>Figure 21. Percent of recreation and tourism facility types in Washington County.</i> | 36 |
| <i>Figure 22. Percent of recreation and tourism programs in each county in the Indiana Uplands.</i> | 37 |
| <i>Figure 23. Percent of recreation and tourism program types in the Indiana Uplands.</i> | 38 |
| <i>Figure 24. Percent of recreation and tourism program type by county in the Indiana Uplands.</i> | 38 |

TABLE OF TABLES

| | |
|---|---|
| <i>Table 1. Demographic overview of the Indiana Uplands region. (U.S. Census Bureau, 2018)</i> | 4 |
| <i>Table 2. Ranking of Indiana Upland counties on health factors (physical environment, social and economic factors, clinical care, and health behaviors) and health outcomes (length of life and quality of life). (County Health Rankings & Roadmaps, 2019)</i> | 5 |



INTRODUCTION

While rural Americans make up approximately 19.3% of the United States population (Harvard Opinion Research Program, 2018), their concerns and needs are often overlooked. In March of 2018, the Center for Rural Engagement (CRE) at Indiana University (IU) was launched with the aim of partnering with rural communities in Indiana to improve the lives of Hoosiers. One of the key aspects of the Center's mission is to connect communities with the university's resources to address the challenges facing rural communities today. Research has identified that rural residents believe that the major challenges facing their communities and families are related to health and to the economy (Harvard Opinion Research Program, 2018). As two key components of quality of life (Diener & Eunkook, 1997; The WHOQOL Group, 1998), identifying solutions to health and economic challenges is critical.

In early conversations with stakeholders, the Center for Rural Engagement found that the development and capitalization of parks, recreation, and tourism assets was a priority for communities in Southwest Central Indiana. Research has shown that park and recreation resources contribute to individual health behaviors (Kaczynski, Potwarka, & Saelens, 2008) and that large forest areas have been associated with reductions in mental health symptoms (Akpınar, Barbosa-Leiker, & Brooks, 2016). Tourism has been seen as an important contributor to economic revitalization (Alonso

Indiana Uplands

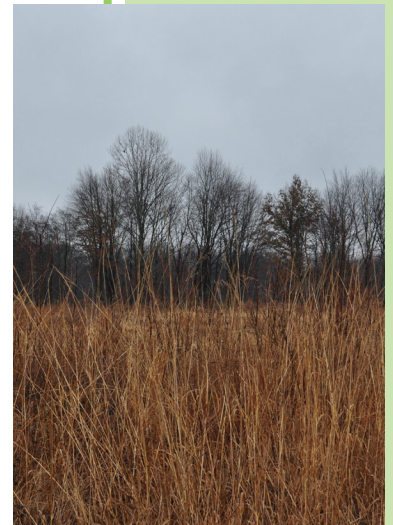
& Liu, 2012), and evidence has been found that recreational spending in rural communities can lead to increased economic activity (Bergstrom, Cordell, Ashely, & Watson, 1990). Efforts to increase tourism in an area have also been shown to increase pride in the community (Wang & Pfister, 2008), which has a strong positive relationship with quality of life (Baker & Palmer, 2006). Moreover, the money that states invest in parks and recreation, natural resources, and other public goods has been shown to increase quality of life across levels of income, gender, and race (Flavin, 2019).

Given that parks, recreation, and tourism resources and opportunities are linked to health, the economy, and quality of life, and are a priority for rural communities in Southwest Central Indiana, the Center for Rural Engagement partnered with the Eppley Institute for Parks and Public Lands (Eppley Institute) at Indiana University to better understand the assets in the Indiana Uplands region. The goal of the study was to develop a comprehensive inventory of the available public, non-profit, and private conservation or recreation areas and resources, recreation and tourism related facilities, and recreation programs in the Indiana Uplands region, defined as Brown, Crawford, Daviess, Dubois, Greene, Lawrence, Martin, Monroe, Orange, Owen, and Washington counties (see Figure 1 for a map of the Indiana Uplands region). Developing information on the existing resources, the public's access to them, and perceptions of them, will help identify opportunities for improvement to guide the Center for Rural Engagement in its work in assisting communities with economic sustainability, health, and quality of life.

STUDY PURPOSE

This study was undertaken to better understand the resources in the Indiana Uplands region and the opportunities that exist. Specifically, the purpose was to:

- Develop an inventory of the region's resources, which include public, non-profit, and private conservation and recreation areas, recreation and tourism facilities, and recreation and tourism programming in 11 counties;
- Map the public, non-profit, and private conservation and recreation areas and facilities in the 11 Indiana counties; and
- Provide recommendations to improve park, recreation, and protected land resources to assist communities with economic sustainability, health, and quality of life.



BACKGROUND

The Indiana Uplands region includes Brown, Crawford, Daviess, Dubois, Greene, Lawrence, Martin, Monroe, Orange, Owen, and Washington counties. It is located in Southwest Central Indiana (Figure 1). It is unique to Indiana in that the region is characterized by a hilly landscape with caves and waterfalls (National Climatic Data Center, n.d.). It covers approximately 4,500 square miles (2,880,000 acres) and includes 48 cities and towns (Regional Opportunity Initiatives, n.d.). There are 38 municipal agencies which manage parks and recreation in the counties, as well as five divisions of the Indiana Department of Natural Resources (State Parks, Forestry, Nature Preserves, Fish and Wildlife, and Outdoor Recreation) and two federal agencies (U.S. Forest Service and U.S. Fish and Wildlife Service) which manage land in the region.

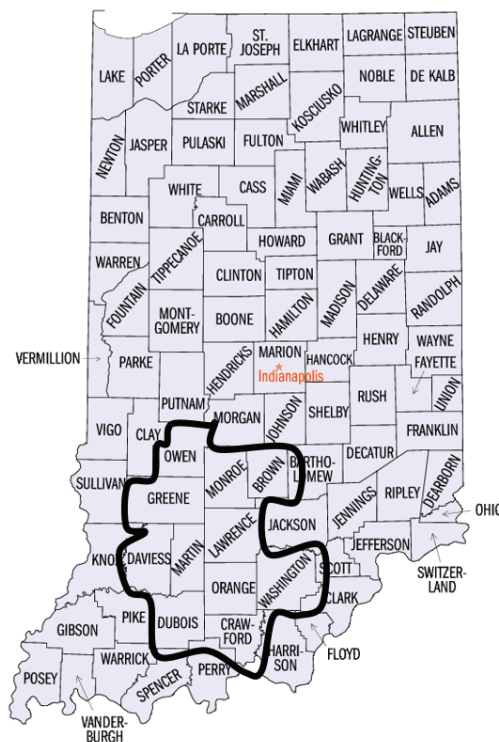


Figure 1. Indiana Uplands region.

The total population of the Indiana Uplands region is estimated to be 404,589; however, the population varies widely at the county level (U.S. Census Bureau, 2018) (Table 1). Martin County and Crawford County have the smallest populations with 10,217 and 10,558 people respectively, while Monroe County has the largest at 146,917 people (U.S. Census Bureau, 2018). The rest of the counties fall between 15,000 to 46,000 in size. The population per square mile also varies, with about 35 people per square mile in Crawford County and 350 people per square mile in Monroe County (U.S. Census Bureau, 2018).

Indiana Uplands

As for age, the average in the region for persons under 18 is approximately 22%, while persons over 65 is 18%. All of the counties are evenly split by gender. The average percentage of high school completion in the region is high at 85%; however, just 18% of the population has a higher education degree. The percentage of households with internet access in the region ranges from approximately 56% in Crawford County to 80% in Monroe County, with an average of about 67% (U.S. Census Bureau, 2018). This suggests that more than 30% of households across the region do not have access to the internet.

| VARIABLE | BRO | CRA | DAV | DUB | GRE | LAW | MAR | MON | ORA | OWE | WAS |
|---|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| Population estimate, 2018 | 15,234 | 10,558 | 33,147 | 42,565 | 32,006 | 45,668 | 10,217 | 146,917 | 19,489 | 20,845 | 27,943 |
| Population per square mile, 2010 | 48.9 | 35.1 | 73.7 | 98 | 61.1 | 102.7 | 30.8 | 349.7 | 49.8 | 56 | 55 |
| Persons under 18 years | 18.3% | 21.8% | 29.2% | 24.3% | 22.1% | 22.0% | 22.5% | 15.9% | 22.9% | 21.4% | 23.0% |
| Persons 65 years and over | 23.6% | 19.2% | 15.2% | 16.9% | 19.2% | 19.7% | 19.1% | 12.6% | 19.2% | 18.9% | 16.8% |
| Females | 50.6% | 49.3% | 49.7% | 50.1% | 49.9% | 50.5% | 49.4% | 50.2% | 50.2% | 49.6% | 50.1% |
| Households with Internet subscription, 2013-2017 | 66.0% | 55.7% | 60.3% | 76.6% | 66.8% | 69.8% | 67.9% | 80.1% | 61.9% | 64.0% | 62.7% |
| High school graduate or higher, 25 years +, 2013-2017 | 90.0% | 81.9% | 74.1% | 88.5% | 87.0% | 89.0% | 83.5% | 91.9% | 83.3% | 85.3% | 85.1% |
| Bachelor's degree or higher, 25 years +, 2013-2017 | 25.5% | 10.4% | 14.2% | 21.4% | 14.5% | 16.1% | 11.0% | 45.8% | 11.8% | 12.7% | 12.1% |
| Median household income, 2013-2017 | 59,292 | 40,067 | 48,355 | 57,307 | 49,648 | 49,985 | 49,372 | 45,689 | 42,803 | 48,315 | 46,861 |
| Persons in poverty | 10.9% | 16.2% | 13.4% | 8.3% | 11.6% | 13.3% | 12.5% | 21.6% | 14.4% | 14.7% | 13.5% |

Table 1. Demographic overview of the Indiana Uplands region. (U.S. Census Bureau, 2018)

Bro = Brown County, Cra = Crawford County, Dav = Daviess County, Dub = Dubois County, Gre = Greene County, Law = Lawrence County, Mar = Martin County, Mon = Monroe County, Ora = Orange County, Owe = Owen County, and Was = Washington County

ECONOMIC OVERVIEW OF THE INDIANA UPLANDS

The median household income ranges from \$40,067 in Crawford County to \$59,292 in Brown County, with an average of \$48,881 (U.S. Census Bureau, 2018). The Indiana Uplands average is about \$9,000 below the national average of \$57,652 (U.S. Census Bureau, 2018). The poverty rate in the counties ranges from 8.3% in Dubois County to 21.6% in Monroe County, with an average of 13.7% (U.S. Census Bureau, 2018). The estimate for persons in poverty at the national level is 12.3%, making the estimate for the Indiana Uplands just a little higher than the national average (U.S. Census Bureau, 2018).

HEALTH IN THE INDIANA UPLANDS

Among the 92 Indiana counties, seven of the 11 Indiana Uplands counties, rank between 47 and 92 in health factors, with four of them ranking in the lowest quadrant for health factors (County Health Rankings & Roadmaps, 2019) (Table 2). Crawford County is ranked last in the state for health factors (County Health Rankings & Roadmaps, 2019). In terms of health outcomes, six of the eleven Indiana Uplands counties rank between 47 and 92, with two of them ranking in the lowest quadrant for health outcomes (County Health Rankings & Roadmaps, 2019).

| COUNTY | HEALTH FACTORS | HEALTH OUTCOMES |
|------------|----------------|-----------------|
| Brown | 15 | 23 |
| Crawford | 92 | 82 |
| Daviess | 61 | 36 |
| Dubois | 4 | 12 |
| Greene | 76 | 57 |
| Lawrence | 56 | 47 |
| Martin | 29 | 31 |
| Monroe | 16 | 19 |
| Orange | 66 | 67 |
| Owen | 71 | 64 |
| Washington | 79 | 74 |

Table 2. Ranking of Indiana Upland counties on health factors (physical environment, social and economic factors, clinical care, and health behaviors) and health outcomes (length of life and quality of life). (County Health Rankings & Roadmaps, 2019)



METHODS

The Indiana Uplands park, recreation, and protected lands inventory and opportunity mapping project included research and civic engagement. The research component comprised the identification of public, non-profit, and private conservation and recreation areas, recreation and tourism facilities, and recreation and tourism programming, their accessibility, and the benchmark analysis. The civic engagement piece of the study included focus groups with stakeholders in the 11 counties of the Indiana Uplands region to understand perceptions of resource use and opportunities for the region. This section is an abbreviated form of the methods, for a more comprehensive review of the methods see Appendix A.



RESEARCH

IDENTIFICATION OF CONSERVATION AND RECREATION AREAS, FACILITIES, AND PROGRAMMING

This study included a thorough review of the public, non-profit, and private conservation and recreation areas, trails, recreation and tourism facilities, and recreation and tourism programs. This component of the research relied heavily on geographic information systems (GIS) databases, and was supplemented by internet research, existing data, and phone contacts. The conservation and recreation area and resource data was collected through IndianaMap and county GIS webpages (see Appendix B for county GIS database webpages), and included managed lands, cemeteries, lakes, ponds, rivers, streams, wetlands, and karst springs. Trails data was also collected through an IndianaMap GIS database.

Recreation and tourism facilities, defined as a place, amenity, or piece of equipment provided for a particular recreation or visitor experience purpose (adapted from Google Dictionary, 2018), were identified through IndianaMap and county GIS databases, internet research (see Appendix C for a complete list of search terms used), and a GIS database shared by Radius Indiana. The facilities were then categorized by type of service provided using a framework developed the Eppley Institute (see Appendix D for the framework).

Recreation and tourism programming in this study was defined as arranging for or assisting people to be placed in a social, physical, or natural environment which may involve planning and organizing, assembling materials and supplies, arranging the use of facilities, providing leadership, or other actions that lead to the creation of opportunities for leisure (adapted from Bullaro & Edington, 1986, p.12). Information on programs was gathered through internet research, existing data from Radius Indiana, and phone contacts with park and recreation agencies.

All of the data was categorized by ownership type (public or private) and accessibility, in terms of whether the site, facility, or program was open to the public and if there was a fee associated with entry or use. Drafts of the data were brought to the focus groups with stakeholders and updated based on feedback.

BENCHMARK ANALYSIS

Benchmarking allows for a comparison of the park and recreation resources among counties to help plan for growth and improvement. Three rural counties located in the Midwest were chosen for a benchmark comparison. The three counties selected were:

- Putnam County, OH
- Barry County, MI
- Cedar County, IA

The counties were chosen based on their percentage of rural population, demographics, health, and economy. The intent was to select counties that were similar to the counties in the Indiana Uplands in terms of demographics and rural population, but were aspirational in terms of health and the economy.

The indicators used to explore the relationship between the counties included:

1. Acres of federal land (located in county)
2. Acres of state land (located in county)
3. Acres of locally managed park land (includes acreage reported by county and municipal park boards and agencies)
4. Locally managed trail mileage (includes mileage reported by county and municipal park boards and agencies)
5. Existence of a YMCA in the county
6. Existence of a county tourism board/visitor bureau





CIVIC ENGAGEMENT

The civic engagement aspect of the study included a stakeholder focus group in each of the 11 counties, as well as an additional focus group with Indiana Department of Natural Resource (IDNR) leadership to better understand perceptions of existing opportunities and future needs.

FOCUS GROUP MEASURES

A set of questions for the county focus groups was developed by the Eppley Institute. The questions aimed to: understand the level of use and contributors and barriers to use of park and recreation resources; understand the perceived park and recreation resource needs; identify connections between park and recreation resources and health; identify tourism opportunities; and identify partnership opportunities in the county and in the region. The questions were pilot tested by Eppley Institute staff for length, clarity, redundancy, and validity, and adjusted accordingly. A similar set of questions was developed for the IDNR focus group, with an emphasis on use and opportunities pertaining to the IDNR sites in the Indiana Uplands region. A complete list of focus group questions can be found in Appendix D.

FOCUS GROUP PARTICIPANTS

Stakeholders were defined as individuals who represent the community as a result of their position, involvement, interest, influence, or identity in the community, and who maintain a primary residence in the county. The list of stakeholders for the focus groups was developed by the Center for Rural Engagement in conjunction with the Eppley Institute. The stakeholders were divided into two groups: (1) Community Ambassadors,



Indiana Uplands

which included commissioners, mayors, other municipal leaders, and CRE's partners, and (2) Local Resource Experts, which included economic, tourism, recreation, and park experts and leaders.

DATA COLLECTION

The focus groups took place from October to December in 2018 between 4:00pm and 7:00pm. They were conducted by two members of the Eppley Institute research team and lasted approximately 90 minutes each. The number of participants ranged in size from four for Brown and Owen counties to 13 for Monroe County and 14 for the IDNR focus group. On average, there were approximately seven participants per focus group. All of the focus groups were recorded in order to be able to accurately depict the perceptions of the participants.

DATA ANALYSIS

Ten of the focus group recordings were transcribed by the Eppley Institute research team and two were transcribed by Rev.com. The focus group transcriptions were reviewed and re-organized by the Eppley Institute research team to ensure that answers aligned with the correct questions. Focus group data was analyzed in NVivo 12, a widely used software for qualitative data analysis, using pre-defined codes. Six Eppley Institute team members helped to code the data, and the research team lead reviewed all data analyses and made edits to ensure consistency.





FINDINGS

The findings report the conservation and recreation areas, trails, recreation and tourism facilities, recreation and tourism programs, and themes from the focus groups identified at the time of the study. For this reason, they are reported in past tense.

PUBLIC, NON-PROFIT, AND PRIVATE CONSERVATION AND RECREATION AREAS

INDIANA UPLANDS REGION

The Indiana Uplands region included a large amount of public, non-profit, and private conservation and recreation areas. As can be seen in Figure 2, Martin County had a significant amount of federal land in the north side of the county due to the Naval Surface Warfare Center (NSWC) Crane. Brown County and Monroe County also had large percentages of public land. In Brown County, state and federal land covered nearly a third of the county. The eastern side of Monroe County included state park and forest land and Hoosier National Forest. Orange County and Crawford County also had portions of the Hoosier National Forest within their southern and northern borders.

Natural Resources & Greenspace of Eleven Counties

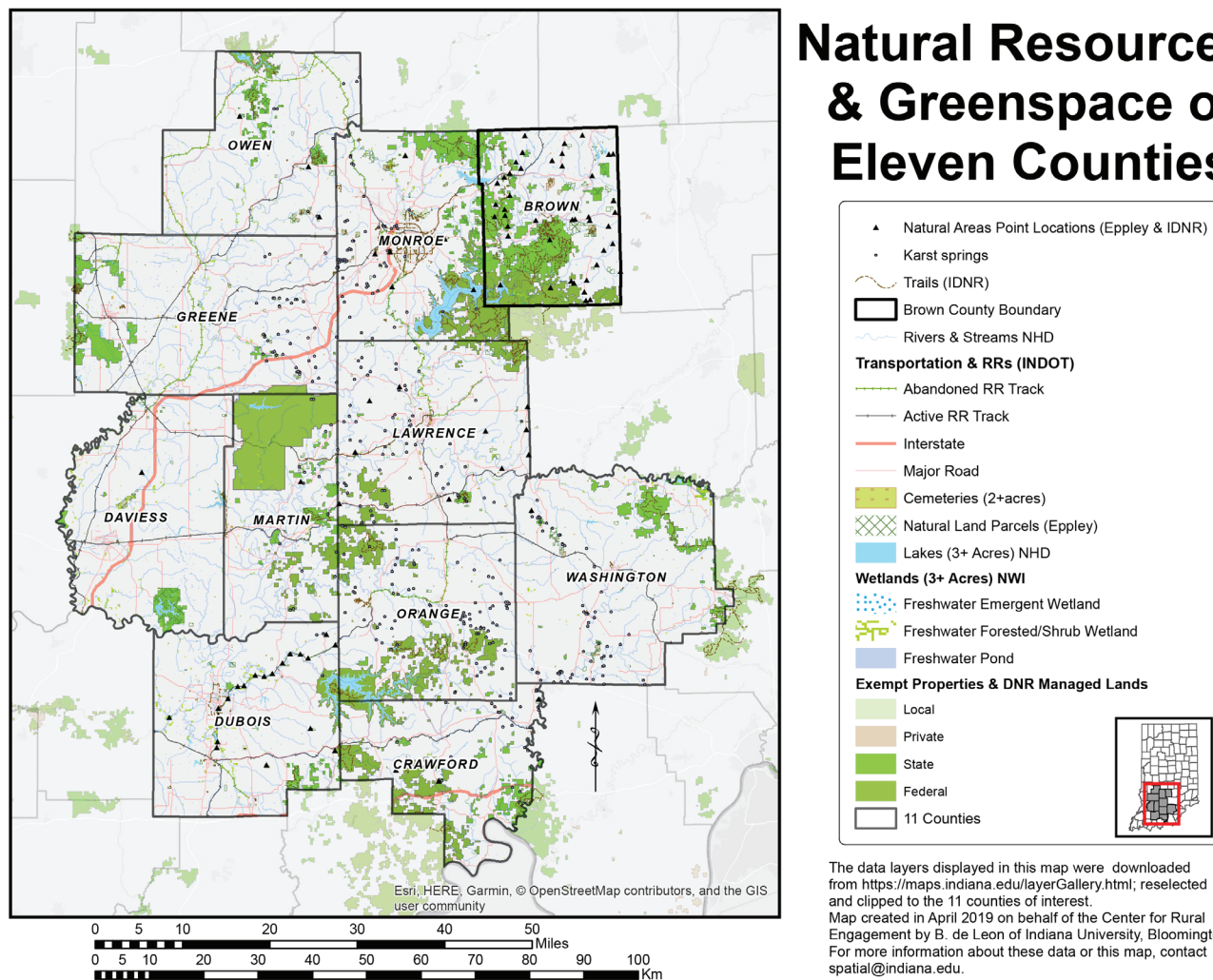


Figure 2. Map of public, non-profit, and private conservation and recreation areas in the Indiana Uplands region.

A total of 402 public, non-profit, and private conservation and recreation areas were identified in the Indiana Uplands which covered approximately 409,658 acres in the region. Overall, the public, non-profit, and private conservation and recreation areas accounted for about 14% of the land in the region. This estimate excluded NSWC Crane, due to the difficulty in determining the amount of conservation or recreation land within the facility. Given this, Monroe County had the largest amount of conservation and recreation acreage in the region (19%; see Figure 3). This can largely be attributed to the existence of Monroe Lake, Morgan-Monroe State Forest, and Hoosier National Forest. Brown County had 16% of the total conservation and recreation acreage in the region, largely due to Yellowwood State Forest, Hoosier National Forest, and Brown County State Park. Brown County was followed closely by Orange County, with 15% of the total conservation and recreation acreage in the region. Orange County had a large portion of Hoosier National Forest and Patoka Lake, which accounted for the large percentage. The county with the least amount of conservation and recreation acreage was Dubois County with just 2%.

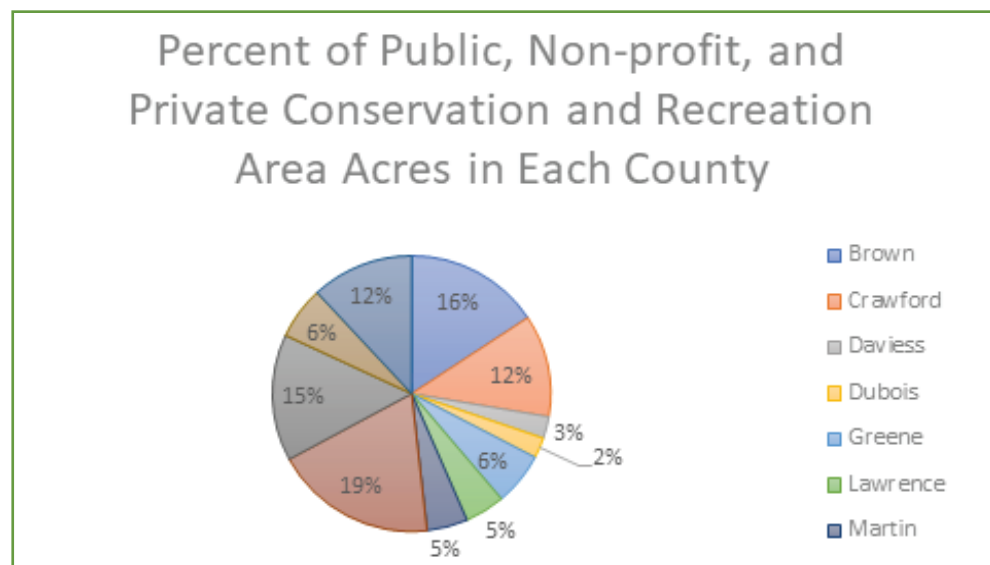


Figure 3. Percent of public, non-profit, and private conservation and recreation area acres in each county.

There were many notable parks, protected areas, and rivers in the region. Hoosier National Forest which has parcels in Brown, Crawford, Dubois, Lawrence, Martin, Monroe, and Orange counties was the largest site. The Indiana Uplands also included the Restle Unit of Muscatatuck National Wildlife Refuge. Well-known state parks such as Brown County State Park, Monroe Lake, Spring Mill State Park, Patoka Lake, and McCormick's Creek State Park can be found in the Indiana Uplands. Other state-owned sites have received attention as well such as Yellowwood State Forest, Morgan-Monroe State Forest, Goose Pond Fish and Wildlife Area, Glendale Fish and Wildlife Area, and Jug Rock Nature Preserve. In addition there were several large local parks in the Indiana Uplands including West Boggs Park, Delaney Creek Park, Sunset Park, and Sycamore Springs Park. The region also included rivers which offer recreation opportunities such as the Blue River and White River.

Indiana Uplands

Among the public, non-profit, and private conservation and recreation areas identified, approximately 71% of them were publicly owned or managed, while 29% were privately owned or managed. When broken down by acreage, federal sites made up approximately 31% of the conservation and recreation area total, while state sites accounted for 63%, local sites accounted for 3%, non-profit sites accounted for 2%, and private sites accounted for 1% of the total (Figure 4). The majority of the conservation and recreation areas were publicly accessible; approximately 71% of them were free to access, while 18% had an associated fee. About 10% of the total conservation and recreation areas identified were not publicly accessible.

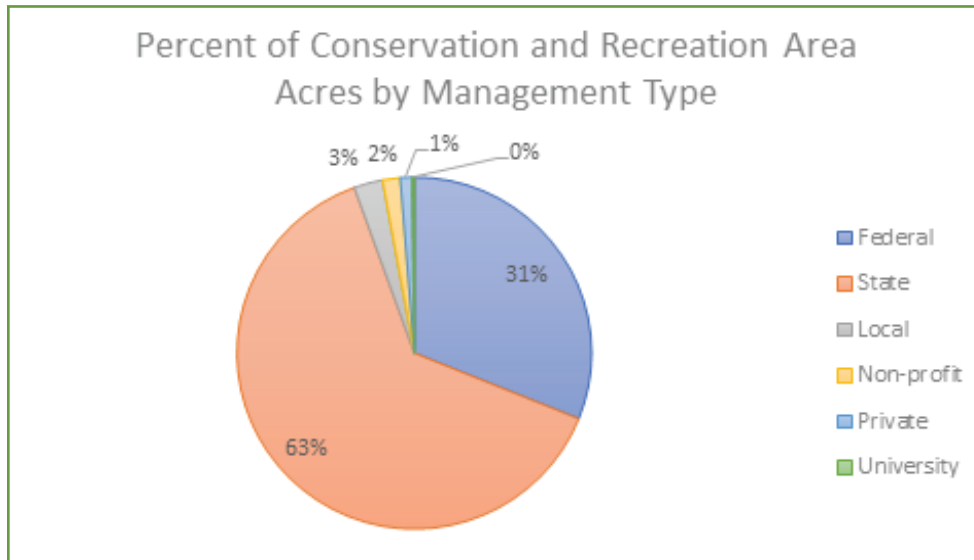


Figure 4. Percent of conservation and recreation acres by management type.

BROWN COUNTY

Brown County had 31 public, non-profit, and private conservation and recreation areas which covered approximately 64,389 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 52% of them were publicly owned or managed, while 48% were privately owned or managed. When broken down by acreage, federal sites made up approximately 30% of the conservation and recreation area total, while state sites accounted for 66%, and non-profit sites accounted for 4% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 61% of them were free to access, while 23% had an associated fee. About 16% of the total conservation and recreation areas identified were not publicly accessible.





CRAWFORD COUNTY

Crawford County had 26 public, non-profit, and private conservation and recreation areas which covered approximately 49,006 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 73% of them were publicly owned or managed, while 27% were privately owned or managed. When broken down by acreage, federal sites made up approximately 49% of the conservation and recreation area total, while state sites accounted for 50%, and private sites accounted for 1% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 77% of them were free to access, while 11.5% had an associated fee. About 11.5% of the total conservation and recreation areas identified were not publicly accessible.



DAVIESS COUNTY

Daviess County had 21 public, non-profit, and private conservation and recreation areas which covered approximately 10,509 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 71% of them were publicly owned or managed, while 29% were privately owned or managed. When broken down by acreage, state sites made up approximately 88% of the conservation and recreation area total, while non-profit sites accounted for 9%, private sites accounted for 2%, and local sites accounted for 1% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 81% of them were free to access, while 14% had an associated fee. About 5% of the total conservation and recreation areas identified were not publicly accessible.



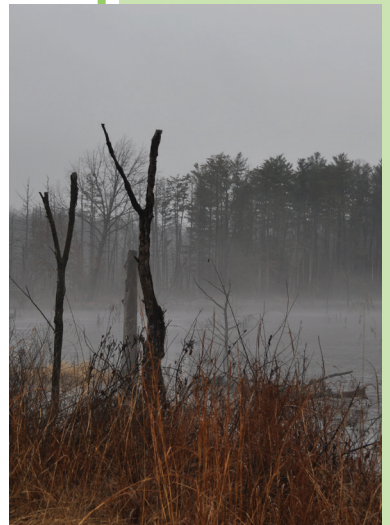
DUBOIS COUNTY

Dubois County had 49 public, non-profit, and private conservation and recreation areas which covered approximately 9,808 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 96% of them were publicly owned or managed, while 4% were privately owned or managed. When broken down by acreage, federal sites made up approximately 5% of the conservation and recreation area total, while state sites accounted for 88%, local sites accounted for 6%, and non-profit sites accounted for 1% of the total. The conservation and recreation areas were publicly accessible; all of them were free to access.

Indiana Uplands

GREENE COUNTY

Greene County had 28 public, non-profit, and private conservation and recreation areas which covered approximately 25,335 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 68% of them were publicly owned or managed, while 32% were privately owned or managed. When broken down by acreage, state sites made up approximately 95% of the conservation and recreation area total, while local sites accounted for 2%, private sites accounted for 2%, and non-profit sites accounted for 1% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 64% of them were free to access, while 25% had an associated fee. About 11% of the total conservation and recreation areas identified were not publicly accessible.



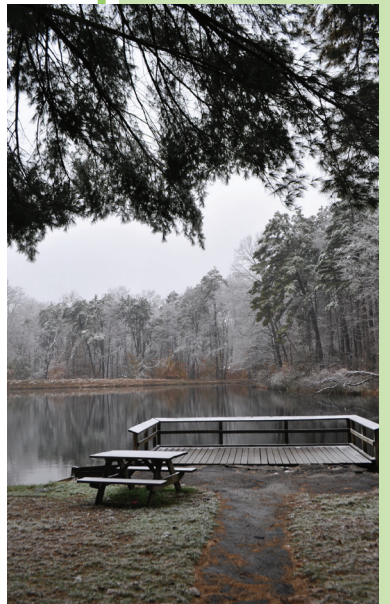
LAWRENCE COUNTY

Lawrence County had 33 public, non-profit, and private conservation and recreation areas which covered approximately 19,076 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 73% of them were publicly owned or managed, while 27% were privately owned or managed. When broken down by acreage, federal sites made up approximately 83% of the conservation and recreation area total, while state sites accounted for 8%, local sites accounted for 4%, private sites accounted for 4%, and non-profit sites accounted for less than 1% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 58% of them were free to access, while 36% had an associated fee. About 6% of the total conservation and recreation areas identified were not publicly accessible.



MARTIN COUNTY

Martin County had 19 public, non-profit, and private conservation and recreation areas which covered approximately 19,380 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 90% of them were publicly owned or managed, while 10% were privately owned or managed. When broken down by acreage, federal sites made up approximately 50% of the conservation and recreation area total, while state sites accounted for 46%, and local sites accounted for 4% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 74% of them were free to access, while 10% had an associated fee. About 16% of the total conservation and recreation areas identified were not publicly accessible.





MONROE COUNTY

Monroe County had 108 public, non-profit, and private conservation and recreation areas which covered approximately 77,286 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 62% of them were publicly owned or managed, while 38% were privately owned or managed. When broken down by acreage, federal sites made up approximately 25% of the conservation and recreation area total, while state sites accounted for 66%, local sites accounted for 6%, private sites accounted for 1%, university sites accounted for 1%, and non-profit sites accounted for 1% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 69% of them were free to access, while 18% had an associated fee. About 13% of the total conservation and recreation areas identified were not publicly accessible.



ORANGE COUNTY

Orange County had 30 public, non-profit, and private conservation and recreation areas which covered approximately 60,864 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 67% of them were publicly owned or managed, while 33% were privately owned or managed. When broken down by acreage, federal sites made up approximately 52% of the conservation and recreation area total, while state sites accounted for 45%, and private sites accounted for 3% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 77% of them were free to access, while 20% had an associated fee. About 3% of the total conservation and recreation areas identified were not publicly accessible.



OWEN COUNTY

Owen County had 22 public, non-profit, and private conservation and recreation areas which covered approximately 25,193 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 59% of them were publicly owned or managed, while 41% were privately owned or managed. When broken down by acreage, federal sites made up approximately 31% of the conservation and recreation area total, while state sites accounted for 66%, and non-profit sites accounted for 3% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 45% of them were free to access, while 41% had an associated fee. About 14% of the total conservation and recreation areas identified were not publicly accessible.

WASHINGTON COUNTY

Washington County had 32 public, non-profit, and private conservation and recreation areas which covered approximately 48,695 acres. Among the public, non-profit, and private conservation and recreation areas identified, approximately 81% of them were publicly owned or managed, while 19% were privately owned or managed. When broken down by acreage, state sites made up approximately 92% of the conservation and recreation area total, while local sites accounted for 6%, and non-profit sites accounted for 2% of the total. The majority of the conservation and recreation areas were publicly accessible; approximately 65% of them were free to access, while 16% had an associated fee. About 19% of the total conservation and recreation areas identified were not publicly accessible.



TRAILS

INDIANA UPLANDS REGION

The Indiana Uplands region included 477 existing and planned trail segments. The most notable trails in the region were the long-distance Knobstone and Tecumseh trails, the local Milwaukee, Bloomington Rail, and B-Line trails, and the mountain bike trails in Brown County State Park. As seen in Figure 5, the majority of trails occurred within a single county and very few were long-distance trails. Brown County and Monroe County both had the largest number of trails. The Monroe County trails tended to clump around the City of Bloomington, with some located in the Hoosier National Forest, while the Brown County trails largely occurred within Brown County State Park and Yellowwood State Forest. Several abandoned railroads were also identified in the Indiana Uplands region and could be important for future trail development. The abandoned railroads were most prevalent in Greene County, Lawrence County, and Orange County.

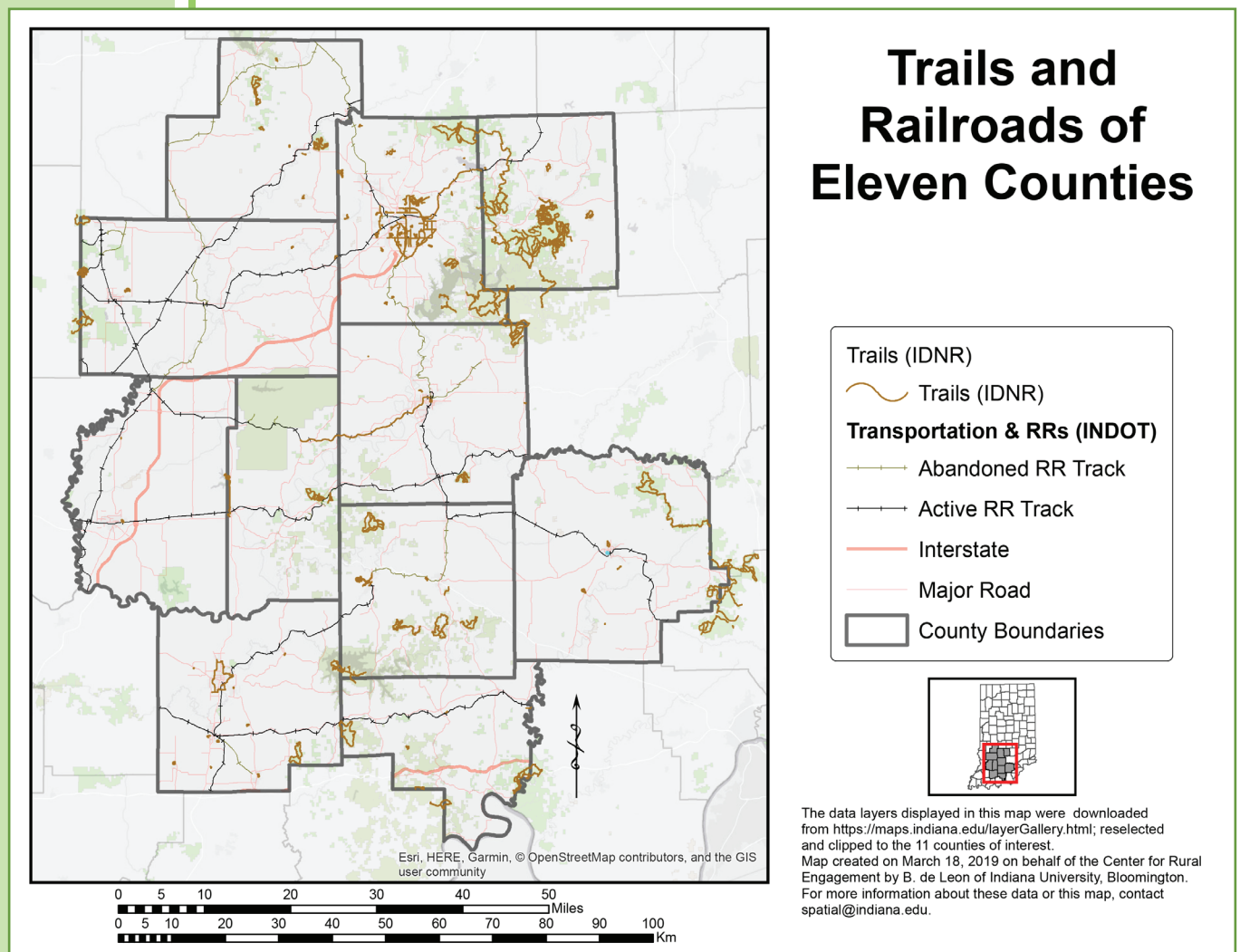


Figure 5. Map of trails and railroads in the Indiana Uplands region.

Indiana Uplands

Monroe County had 150 existing and planned trail segments which accounted for the largest percentage (31%) of trails in the region (Figure 6). There were 105 trail segments in Brown County which made up 22% of the total number of trails in the region. Greene County and Dubois County both had about 40 trail segments which accounted for 9% and 8% respectively of the total. The county with the least number of trail segments was Daviess County with 6 trails (1%).

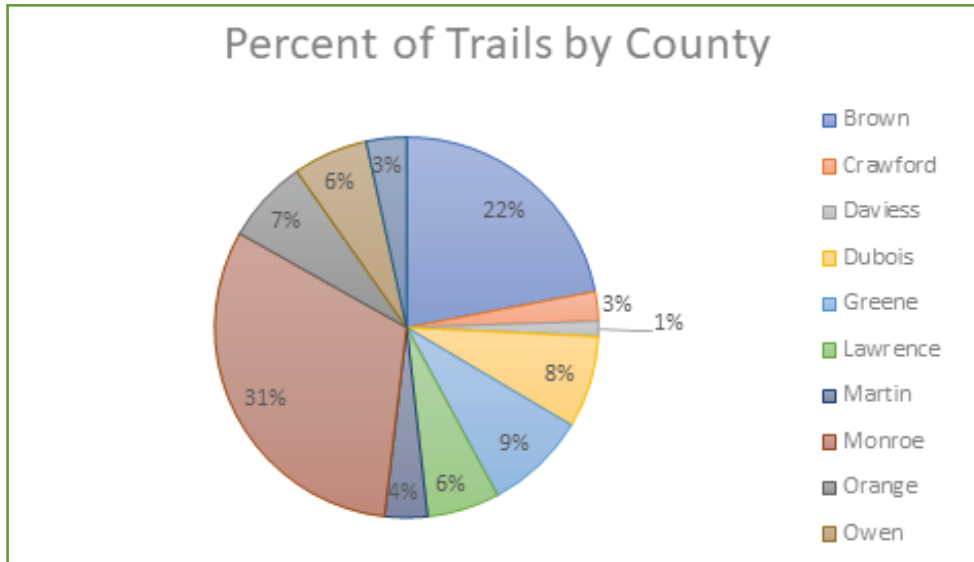


Figure 6. Percent of trails in each county of the Indiana Uplands.

The existing and planned trails in the Indiana Uplands covered approximately 721 miles. Monroe County had 200 miles which accounted for the largest percentage (28%) of mileage in the region (Figure 7). Brown County had 198 miles which made up 27% of the total number of trail mileage in the region. Orange County followed with about 73 miles which accounted for 10% of the total mileage. Daviess County had the lowest trail mileage at 4 miles (1%).

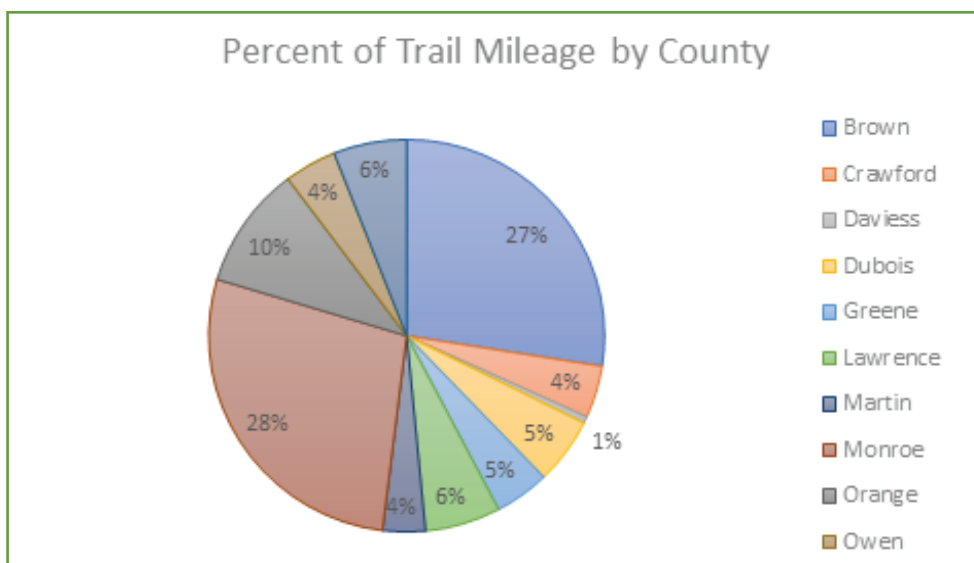


Figure 7. Percent of trail mileage in each county of the Indiana Uplands.



Among the trails identified, approximately 92% of them were publicly managed, while 8% were privately managed. All of the trails were publicly accessible; approximately 70% of them were free to access, while 30% had an associated fee.

BROWN COUNTY

Brown County had 105 existing and planned trails which spanned 198 miles. Among the trails identified, approximately 98% of them were publicly managed, while 2% were privately managed. All of the trails were publicly accessible; approximately 41% of them were free to access, while 59% had an associated fee.

CRAWFORD COUNTY

Crawford County had 12 existing and planned trails which spanned 31 miles. Among the trails identified, all of them were publicly managed. All of the trails were also publicly accessible; approximately 58% of them were free to access, while 42% had an associated fee.

DAVISS COUNTY

Daviess County had 6 existing and planned trails which spanned 4 miles. Among the trails identified, all of them were publicly managed. All of the trails were also publicly accessible; approximately 33% of them were free to access, while 67% had an associated fee.

DUBOIS COUNTY

Dubois County had 37 existing and planned trails which spanned 39 miles. Among the trails identified, approximately 97% of them were publicly managed, while 3% were privately managed. All of the trails were publicly accessible; approximately 92% of them were free to access, while 8% had an associated fee.

Indiana Uplands

GREENE COUNTY

Greene County had 41 existing and planned trails which spanned 32 miles. Among the trails identified, approximately 83% of them were publicly managed, while 17% were privately managed. All of the trails were publicly accessible; approximately 32% of them were free to access, while 68% had an associated fee.

LAWRENCE COUNTY

Lawrence County had 29 existing and planned trails which spanned 45 miles. Among the trails identified, approximately 83% of them were publicly managed, while 17% were privately managed. All of the trails were publicly accessible; approximately 69% of them were free to access, while 31% had an associated fee.

MARTIN COUNTY

Martin County had 17 existing and planned trails which spanned 25 miles. Among the trails identified, approximately 94% of them were publicly managed, while 6% were privately managed. All of the trails were publicly accessible; approximately 82% of them were free to access, while 18% had an associated fee.

MONROE COUNTY

Monroe County had 150 existing and planned trails which spanned 200 miles. Among the trails identified, approximately 93% of them were publicly managed, while 7% were privately managed. All of the trails were publicly accessible; approximately 98% of them were free to access, while 2% had an associated fee.

ORANGE COUNTY

Orange County had 34 existing and planned trails which spanned 73 miles. Among the trails identified, approximately 82% of them were publicly managed, while 18% were privately managed. All of the trails were publicly accessible; approximately 88% of them were free to access, while 12% had an associated fee.

OWEN COUNTY

Owen County had 30 existing trails which spanned 31 miles. Among the trails identified, approximately 90% of them were publicly managed, while 10% were privately managed. All of the trails were publicly accessible; approximately 40% of them were free to access, while 60% had an associated fee.

WASHINGTON COUNTY

Washington County had 16 existing trails which spanned 43 miles. Among the trails identified, approximately 69% of them were publicly managed, while 31% were privately managed. All of the trails were publicly accessible; approximately 69% of them were free to access, while 31% had an associated fee.



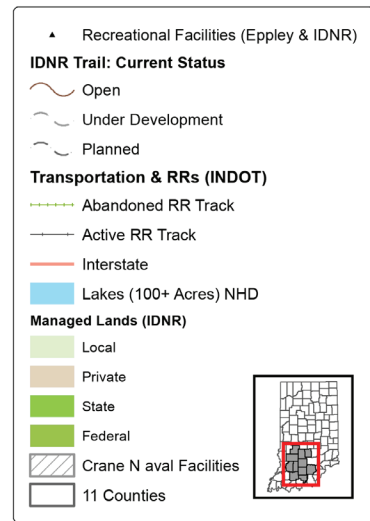
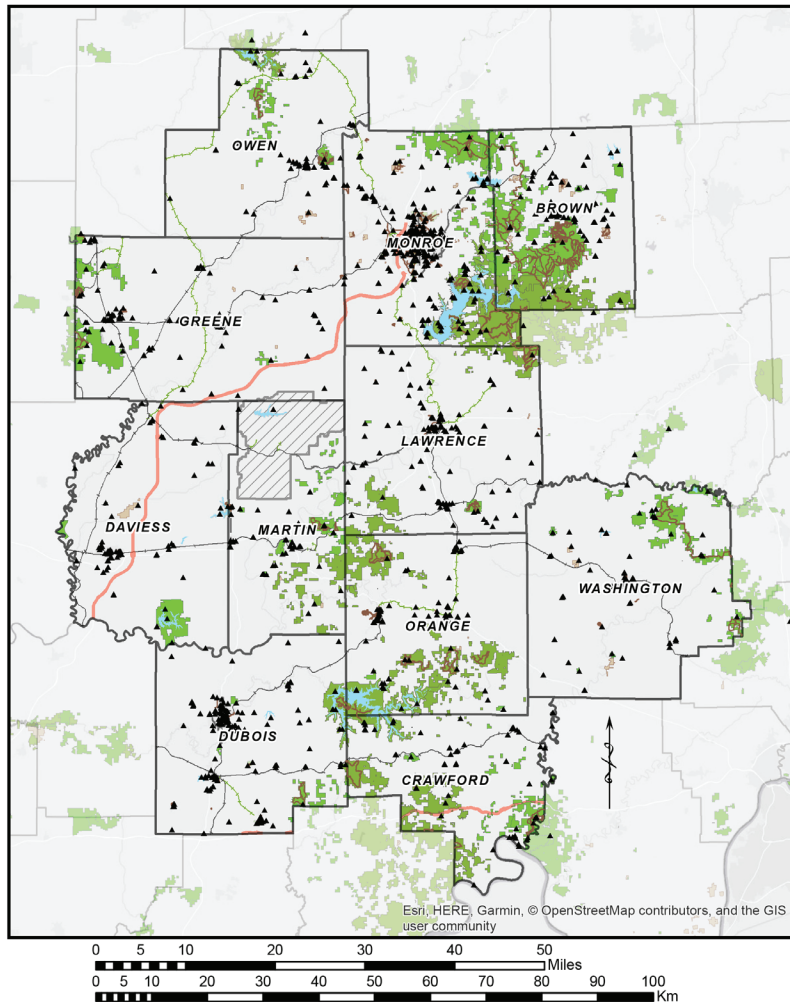
RECREATION AND TOURISM FACILITIES

INDIANA UPLANDS REGION

The Indiana Uplands region included 1,145 sites with a total of 4,920 recreation and tourism facilities. Many of the sites were well known such as League Stadium, featured in the 1992 hit film, “A League of Their Own” or the Gus Grissom Boyhood Home, which highlights the early life of Gus Grissom, the first man to fly in space in twice. Others were key tourism sites like West Baden Springs Hotel, French Lick Resort, and the French Lick Scenic Railway. The region also included Paoli Peaks, southern Indiana’s very own ski and snowboarding slopes and Wilstem Ranch, a facility with elephants, giraffes, and a zip-line all in one place. Outdoor recreation was a big aspect of the Indiana Uplands and places like Goose Pond Fish and Wildlife Area, Redbird State Recreation Area, and the state-owned parks and forests were important for offering opportunities for birding, hiking, hunting, fishing, and enjoying off-road vehicle trails. The Indiana Uplands was also unique due to its karst topography and boasted caves open to tourists such as Marengo Cave, Blue Springs Caverns, and Wyandotte Caves. The T.C. Steele State Historic Site, Sculpture Trails Outdoor Museum, Gasthoff Amish Village, and Monastery Immaculate Conception highlighted the history and culture of the Indiana Uplands. Indiana University was also a significant resource in the region, and like many universities offered a variety of recreation and tourism opportunities for the surrounding area ranging from sports to arts and theatre.

The facilities were generally clumped around the larger cities and towns in each county (Figure 8). However, many of the counties had dispersed facilities. This was especially apparent in Monroe, Lawrence, and Washington counties.

Recreational Lands and Facilities of Eleven Counties



The data layers displayed in this map were downloaded from <https://maps.indiana.edu/layerGallery.html>; reselected and clipped to the 11 counties of interest. Map created in April 2019 on behalf of the Center for Rural Engagement by B. de Leon of Indiana University, Bloomington. For more information about these data or this map, contact spatial@indiana.edu.

Figure 8. Map of recreation and tourism facilities in the Indiana Uplands region.

Monroe County had 1,193 recreation and tourism facilities, which accounted for the largest percentage (24%) of facilities in the region (Figure 9). There were 737 facilities in Dubois County, which made up 15% of the total number of facilities in the region. Brown County and Lawrence County both had more than 400 facilities, which accounted for 9% each of the total. The county with the least number of facilities was Martin County, with 201 facilities (4%).

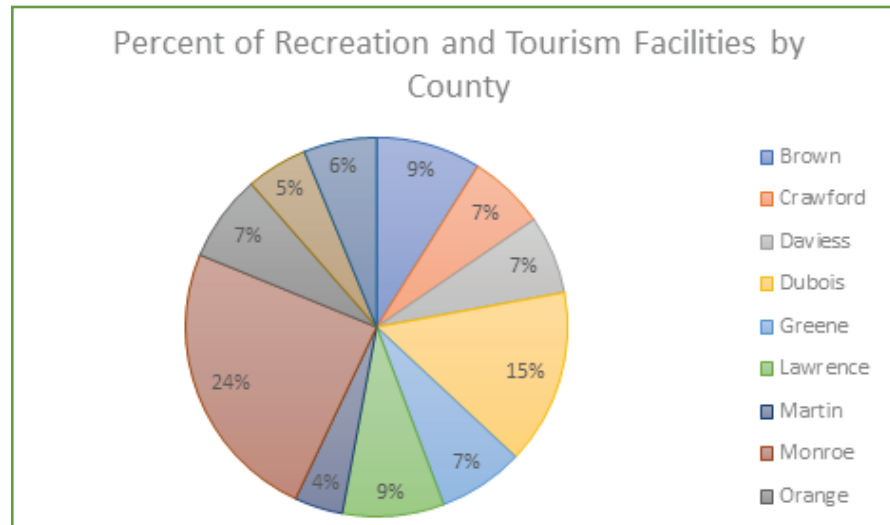


Figure 9. Percent of recreation and tourism facilities in each county of the Indiana Uplands.

The largest number of facilities pertained to outdoor recreation (30%), followed by sports (20%), gathering spaces (16%), and recreation and fitness (12%) (Figure 10). The rest of the facility types accounted for less than 10% each of the total. Aquatic facilities were identified as the type with the fewest facilities at just 3% of the total. Among the facilities identified, approximately 68% of them were publicly owned, while 32% were privately owned. The majority of the facilities were publicly accessible; approximately 59% of them were free to access, while 40% had an associated fee. Just 1% of the total recreation and tourism facilities identified were not publicly accessible.

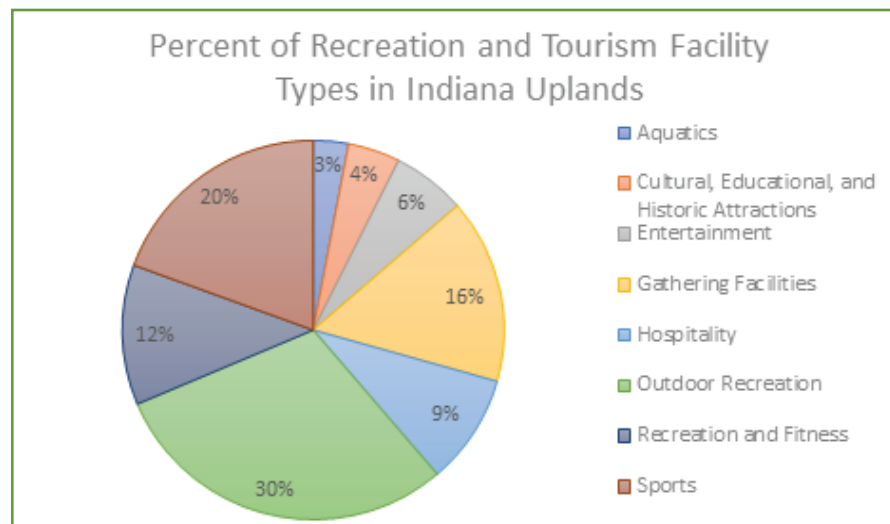


Figure 10. Percent of recreation and tourism facility types in the Indiana Uplands region.



BROWN COUNTY

Brown County had 437 recreation and tourism facilities. The largest number of facilities were related to outdoor recreation (39%) (Figure 11). This was followed by hospitality facilities (13%), sports facilities (12%), and cultural, educational, and historic attractions (11%) at much lower percentages. The least frequent facility type was aquatics facilities (3%). In Brown County, approximately 53% of the facilities were privately owned, while 47% were publicly owned. The majority of the facilities were publicly accessible; approximately 40% of them were free to access, while 56% had an associated fee. Just 4% of the total recreation and tourism facilities identified were not publicly accessible.

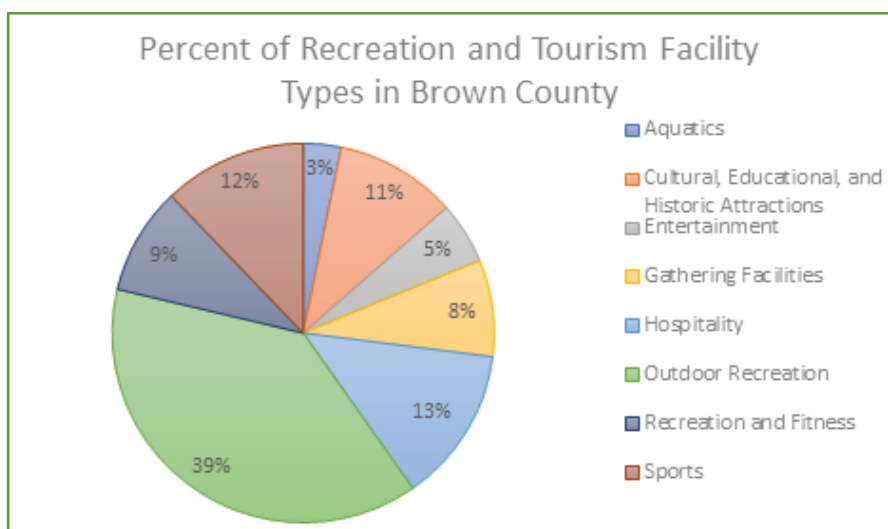


Figure 11. Percent of recreation and tourism facility types in Brown County.



CRAWFORD COUNTY

Crawford County had 321 recreation and tourism facilities. The largest number of facilities were related to outdoor recreation (45%) (Figure 12). This was followed by gathering facilities (20%) at just less than half the number of outdoor recreation facilities, hospitality facilities (9%), sports facilities (9%), and recreation and fitness facilities (8%). The least frequent facility types included aquatics facilities, cultural, educational, and historic attractions, and entertainment facilities, each at 3%. In Crawford County, approximately 67% of the facilities were publicly owned, while 33% were privately owned. The majority of the facilities were publicly accessible; approximately 58% of them were free to access, while 41% had an associated fee. Just 1% of the total recreation and tourism facilities identified were not publicly accessible.

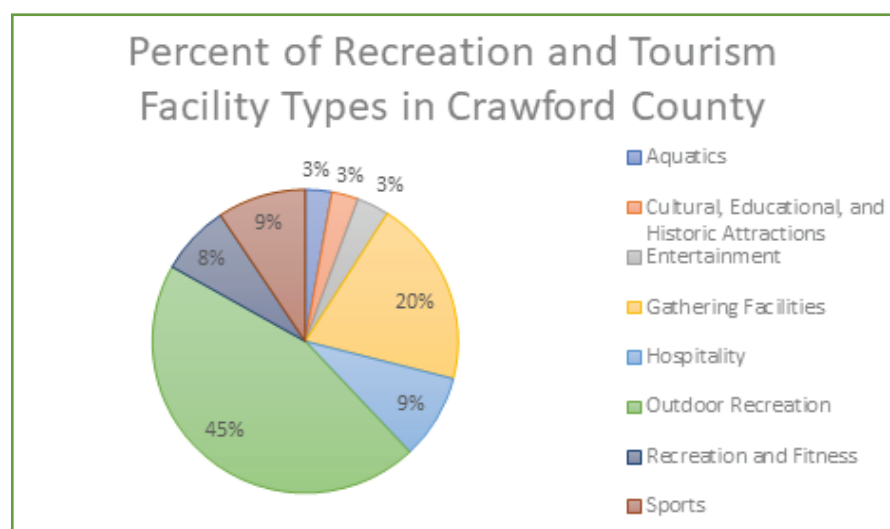


Figure 12. Percent of recreation and tourism facility types in Crawford County.



DAVIESS COUNTY

Daviess County had 328 recreation and tourism facilities. The largest number of facilities were split between outdoor recreation (27%) and sports (26%) (Figure 13). This was followed by gathering facilities (15%), recreation and fitness facilities (12%), and hospitality facilities (10%). The least frequent facility types were aquatics facilities (2%) and cultural, educational, and historic attractions (2%). In Daviess County, approximately 70% of the facilities were publicly owned, while 30% were privately owned. The majority of the facilities were publicly accessible; approximately 68% of them were free to access, while 30% had an associated fee. Just 2% of the total recreation and tourism facilities identified were not publicly accessible.

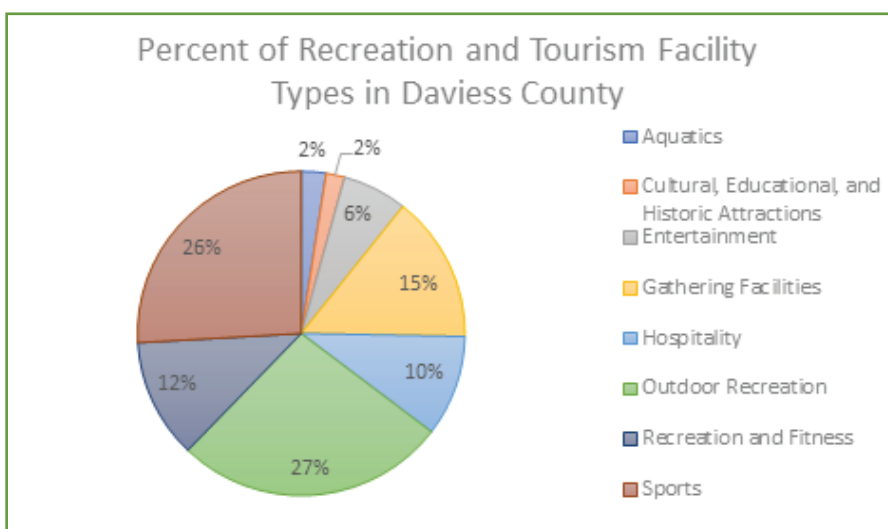


Figure 13. Percent of recreation and tourism facility types in Daviess County.



DUBOIS COUNTY

Dubois County had 735 recreation and tourism facilities. The largest number of facilities were related to outdoor recreation (28%), closely followed by sports facilities (23%) and gathering facilities (20%) (Figure 14). Recreation and fitness facilities also accounted for 11% of the total facilities. The least frequent facility type was aquatics facilities (2%). In Dubois County, approximately 81% of the facilities were publicly owned, while 19% were privately owned. The majority of the facilities were publicly accessible; approximately 75% of them were free to access, while 25% had an associated fee. There were no recreation and tourism facilities identified that were not publicly accessible.

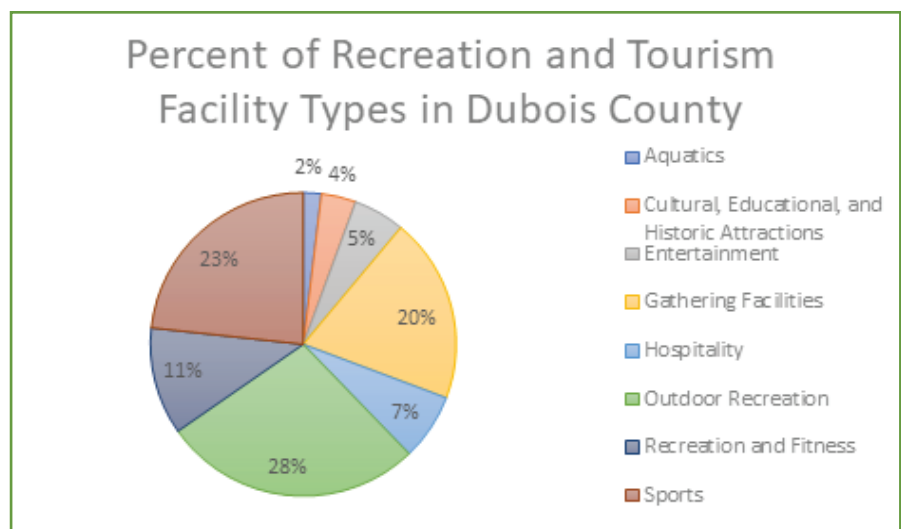


Figure 14. Percent of recreation and tourism facility types in Dubois County.



GREENE COUNTY

Greene County had 358 recreation and tourism facilities. The largest number of facilities were related to sports (26%) (Figure 15). This was followed by outdoor recreation facilities (22%), gathering facilities (16%), and recreation and fitness facilities (11%). The least frequent facility type was aquatics facilities (4%). In Greene County, approximately 78% of the facilities were publicly owned, while 22% were privately owned. The majority of the facilities were publicly accessible; approximately 70% of them were free to access, while 30% had an associated fee. There were no recreation and tourism facilities identified that were not publicly accessible.

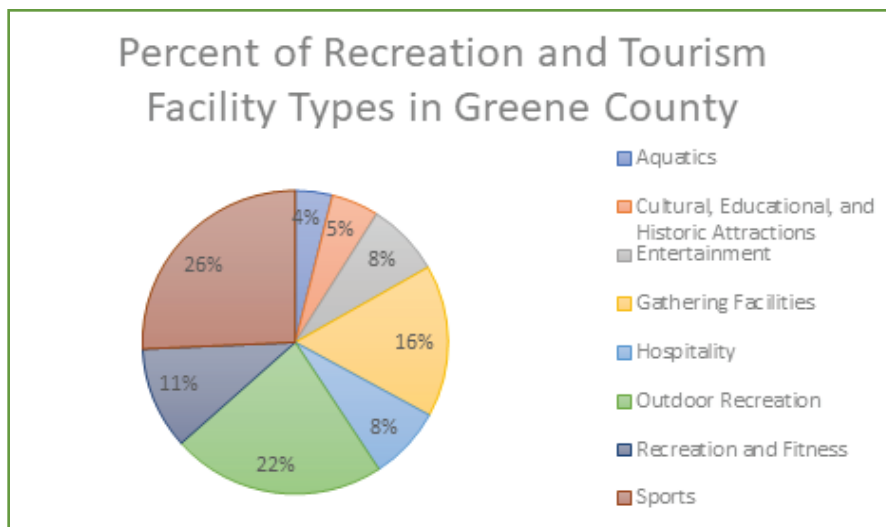


Figure 15. Percent of recreation and tourism facility types in Greene County.



LAWRENCE COUNTY

Lawrence County had 423 recreation and tourism facilities. The largest number of facilities were related to sports (25%), closely followed by outdoor recreation (22%) (Figure 16). Recreation and fitness facilities and gathering spaces were just behind sports and outdoor recreation with 16% and 15% of the total facilities respectively. The least frequent facility type was cultural, educational, and historic attractions (2%). In Lawrence County, approximately 66% of the facilities were publicly owned, while 33% were privately owned. The ownership of about 1% of the facilities was unknown. The majority of the facilities were publicly accessible; approximately 59% of them were free to access, while 40% had an associated fee. Just 1% of the total recreation and tourism facilities identified were not publicly accessible.

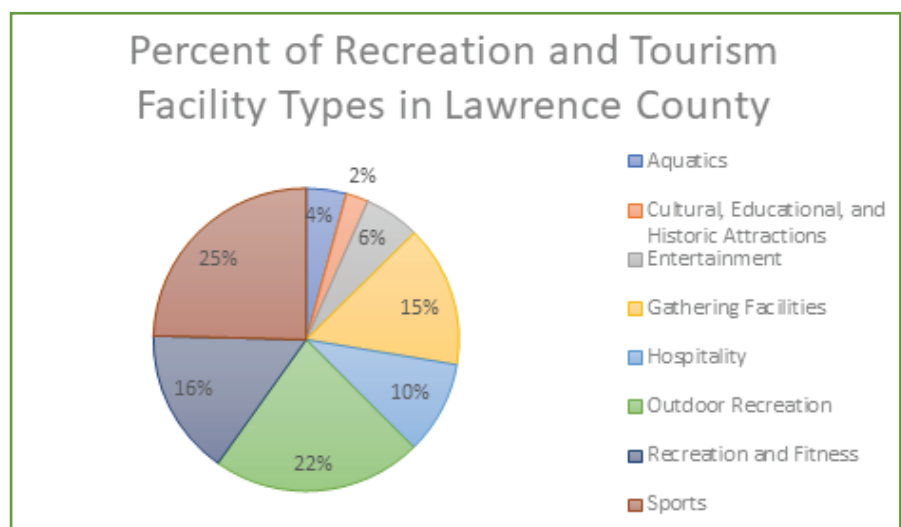


Figure 16. Percent of recreation and tourism facility types in Lawrence County.



MARTIN COUNTY

Martin County had 201 recreation and tourism facilities. The largest number of facilities were related to outdoor recreation (41%) (Figure 17). This was followed by sports facilities (15%) and gathering spaces (14%) at much lower percentages. The least frequent facility type was aquatics facilities (2%). In Martin County, approximately 78% of the facilities were publicly owned, while 16% were privately owned. The ownership of about 6% of the facilities was unknown. The majority of the facilities were publicly accessible; approximately 54% of them were free to access, while 40% had an associated fee. Just 5% of the total recreation and tourism facilities identified were not publicly accessible. The ability to access about 1% of the facilities was unknown.

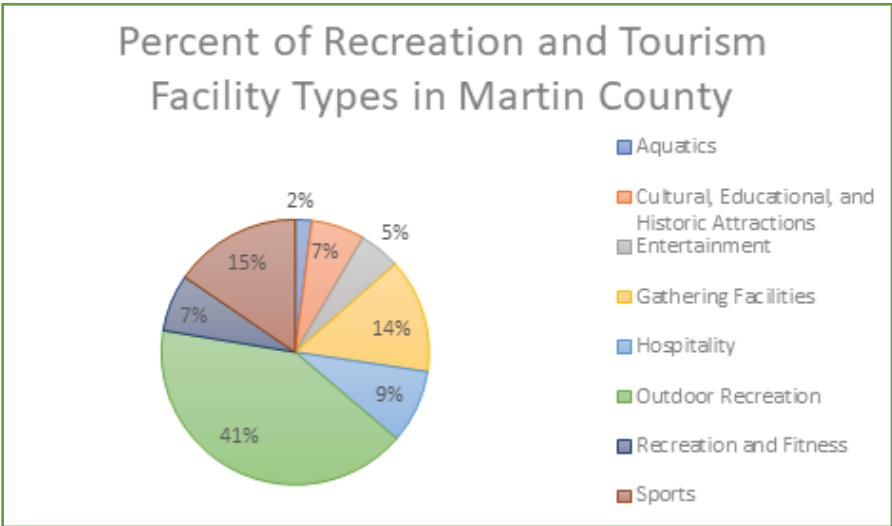


Figure 17. Percent of recreation and tourism facility types in Martin County.



MONROE COUNTY

Monroe County had 1193 recreation and tourism facilities. The largest number of facilities were related to outdoor recreation (27%) (Figure 18). This was followed by sports facilities (20%), recreation and fitness facilities (16%), and gathering facilities (15%). The least frequent facility type was aquatics facilities (3%). In Monroe County, approximately 66% of the facilities were publicly owned, while 34% were privately owned. The majority of the facilities were publicly accessible; approximately 58% of them were free to access, while 42% had an associated fee. There were six recreation and tourism facilities (.5%) identified that were not publicly accessible.

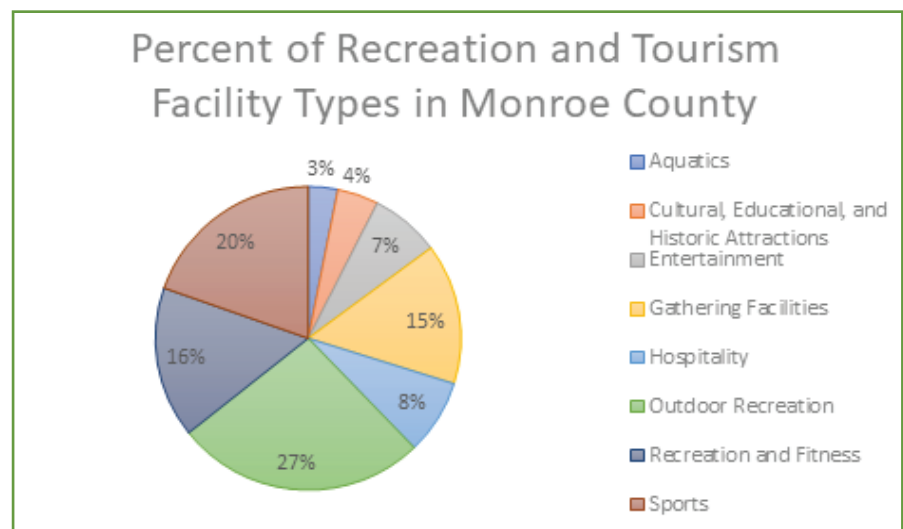


Figure 18. Percent of recreation and tourism facility types in Monroe County.



ORANGE COUNTY

Orange County had 364 recreational facilities. The largest number of facilities were related to outdoor recreation (32%) (Figure 19). This was followed by gathering facilities (18%), sports facilities (17%), and hospitality facilities (12%), all at about half of the percentage of outdoor recreation facilities. The least frequent facility types included aquatics facilities and cultural, educational, and historic attractions, each at 3%. In Orange County, approximately 62% of the facilities were publicly owned, while 38% were privately owned. The majority of the facilities were publicly accessible; approximately 52% of them were free to access, while 48% had an associated fee. There was one recreation and tourism facility identified that was not publicly accessible.

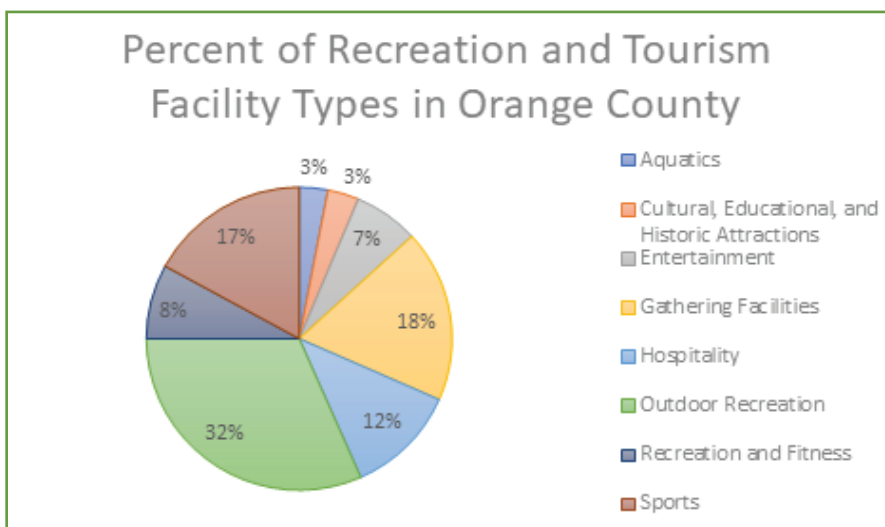


Figure 19. Percent of recreation and tourism facility types in Orange County.



OWEN COUNTY

Owen County had 256 recreational facilities. The largest number of facilities were related to outdoor recreation (30%) (Figure 20). This was followed by sports facilities (17%), gathering facilities (13%), recreation and fitness facilities (12%), and hospitality facilities (12%). The least frequent facility types included aquatics facilities and cultural, educational, and historic attractions, each at 4%. In Owen County, approximately 58% of the facilities were publicly owned, while 41% were privately owned. The ownership of about 2% of the facilities was unknown. The majority of the facilities were publicly accessible; approximately 39% of them were free to access, while 61% had an associated fee. There was one recreation and tourism facility identified that was not publicly accessible.

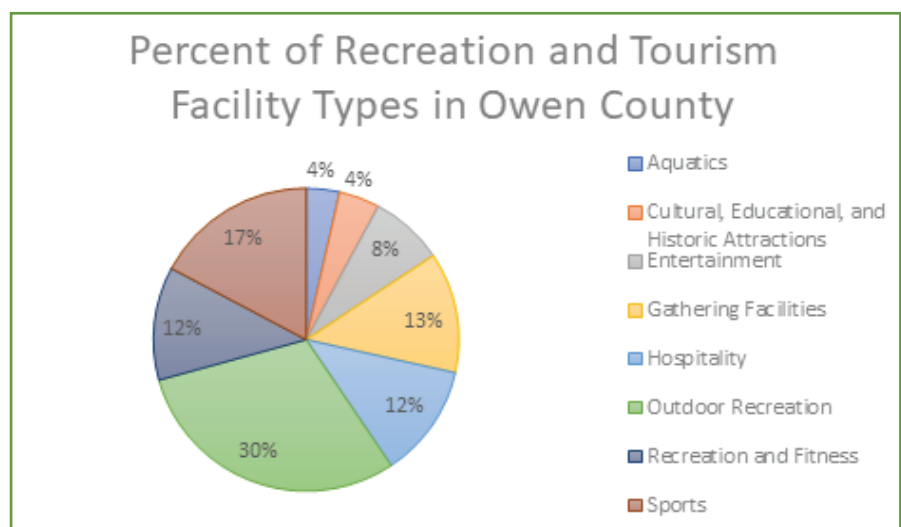


Figure 20. Percent of recreation and tourism facility types in Owen County.



WASHINGTON COUNTY

Washington County had 304 recreational facilities. The largest number of facilities were related to outdoor recreation (33%) (Figure 21). This was followed by gathering facilities (17%), sports facilities (16%), hospitality facilities (11%), and recreation and fitness facilities (10%). The least frequent facility type was aquatics facilities (3%). In Washington County, approximately 73% of the facilities were publicly owned, while 27% were privately owned. The majority of the facilities were publicly accessible; approximately 59% of them were free to access, while 41% had an associated fee. There were three recreation and tourism facilities identified that were not publicly accessible.

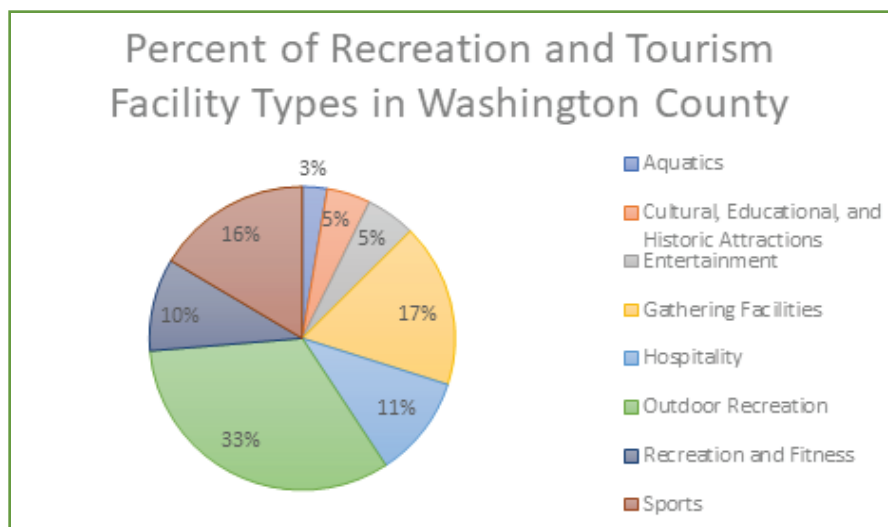


Figure 21. Percent of recreation and tourism facility types in Washington County.

RECREATION AND TOURISM PROGRAMMING

INDIANA UPLANDS REGION

The Indiana Uplands region had 1,275 recreation and tourism programs. Monroe County had 293 recreation and tourism programs, which accounted for 23% of the total programs in the region (Figure 22). There were 171 programs in Brown County, which made up 13% of the total number of programs in the region. Owen County, which made up 11% of the total number of programs in the region. Owen County, Orange County, and Lawrence County all had around 130 programs, which accounted for between 10-11% each of the total. The county with the least number of recreation and tourism programs was Martin County with 33 programs (3%).

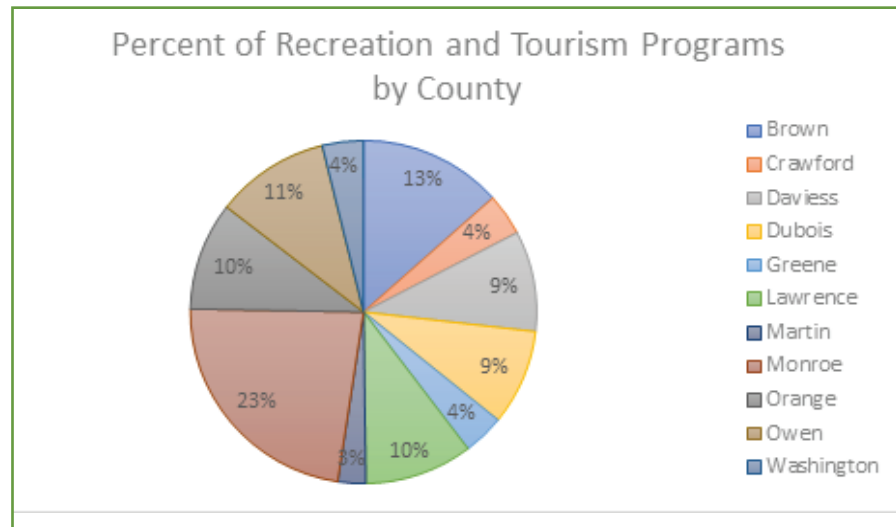


Figure 22. Percent of recreation and tourism programs in each county in the Indiana Uplands.

There were 352 (28%) regular programs and 923 (72%) special events (Figure 23). The regular programs included sports, recreation and fitness, and cultural, educational, and historic programs among others. The special events ranged from fitness programs such as race events to holiday programs, cultural or educational festivals, and music events. Some of the notable events in the region included the Bill Monroe Bean Blossom Bluegrass Festival, Marengo's Underground 5K Run, the Washington Knights of Columbus drawing, Ferdinand's Christkindlmarkt, Linton's Freedom Festival, Bedford's Limestone Capital Half Marathon, Mitchell's Persimmon Festival, Loogootee's Zombie 5K, Bloomington's Lotus World Music & Arts Festival, Paolifest, Spencer's Apple Butter Festival, and Old Settler's Days in Salem, Indiana.

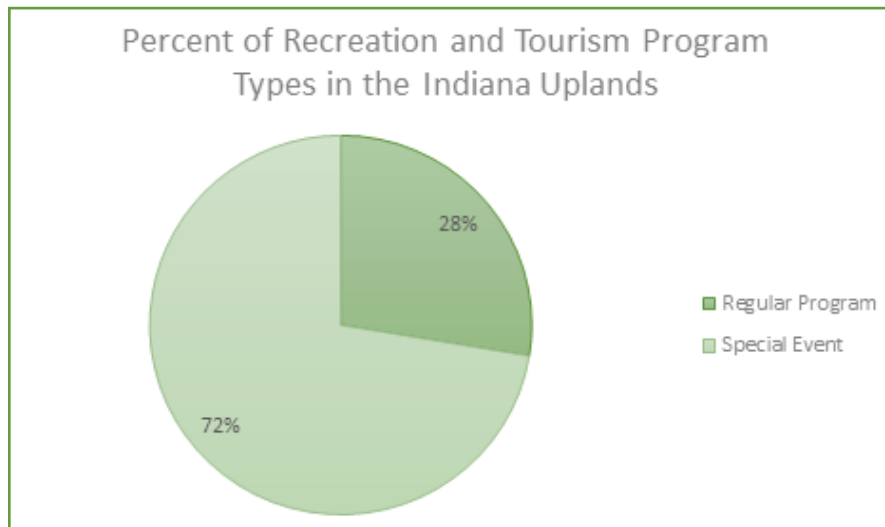


Figure 23. Percent of recreation and tourism program types in the Indiana Uplands.

The trend toward more special events in the region held across all the counties, except for Monroe County, Orange County, and Washington County which all had a more even distribution between regular programs and special events (Figure 24). Among the programs identified, approximately 46% of them were publicly managed, while 54% were privately managed. All of the programs were publicly accessible; approximately 28% of them were free to access, while 72% had an associated fee.

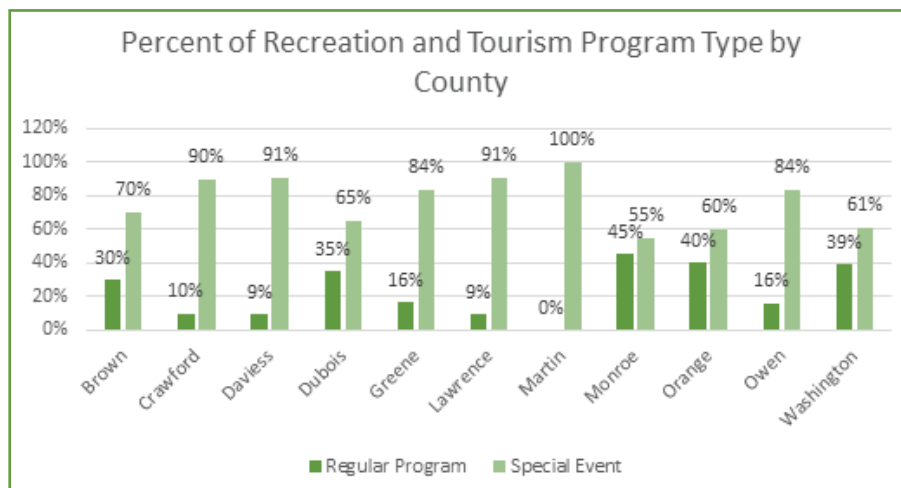


Figure 24. Percent of recreation and tourism program type by county in the Indiana Uplands.

BROWN COUNTY

Brown County had 171 recreation and tourism programs. There were 51 (30%) regular programs and 120 (70%) special events. Among the programs identified, approximately 70% of them were publicly managed, while 30% were privately managed. All of the programs were publicly accessible; approximately 26% of them were free to access, while 74% had an associated fee.

CRAWFORD COUNTY

Crawford County had 50 recreation and tourism programs. There were 5 (10%) regular programs and 45 (90%) special events. Among the programs identified, approximately 82% of them were publicly managed, while 18% were privately managed. All of the programs were publicly accessible; approximately 22% of them were free to access, while 78% had an associated fee.

DAVIESS COUNTY

Daviess County had 121 recreation and tourism programs. There were 11 (9%) regular programs and 110 (91%) special events. Among the programs identified, approximately 26% of them were publicly managed, while 74% were privately managed. All of the programs were publicly accessible; approximately 40% of them were free to access, while 60% had an associated fee.

DUBOIS COUNTY

Dubois County had 115 recreation and tourism programs. There were 40 (35%) regular programs and 75 (65%) special events. Among the programs identified, approximately 39% of them were publicly managed, while 61% were privately managed. All of the programs were publicly accessible; approximately 20% of them were free to access, while 80% had an associated fee.

GREENE COUNTY

Greene County had 49 recreation and tourism programs. There were 8 (16%) regular programs and 41 (84%) special events. Among the programs identified, approximately 35% of them were publicly managed, while 65% were privately managed. All of the programs were publicly accessible; approximately 59% of them were free to access, while 41% had an associated fee.

LAWRENCE COUNTY

Lawrence County had 129 recreation and tourism programs. There were 12 (9%) regular programs and 117 (91%) special events. Among the programs identified, approximately 71% of them were publicly managed, while 29% were privately managed. All of the programs were publicly accessible; approximately 25% of them were free to access, while 75% had an associated fee.

MARTIN COUNTY

Martin County had 33 recreation and tourism programs. All 33 of the programs (100%) were deemed special events. Among the programs identified, approximately 79% of them were publicly managed, while 21% were privately managed. All of the programs were publicly accessible; approximately 24% of them were free to access, while 76% had an associated fee.

Indiana Uplands

MONROE COUNTY

Monroe County had 292 recreation and tourism programs. There were 132 (45%) regular programs and 160 (55%) special events. Among the programs identified, approximately 71% of them were publicly managed, while 29% were privately managed. The management of one of the programs was unknown. All of the programs were publicly accessible; approximately 25% of them were free to access, while 75% had an associated fee.

ORANGE COUNTY

Orange County had 130 recreation and tourism programs. There were 52 (40%) regular programs and 78 (60%) special events. Among the programs identified, approximately 13% of them were publicly managed, while 87% were privately managed. All of the programs were publicly accessible; approximately 27% of them were free to access, while 73% had an associated fee.

OWEN COUNTY

Owen County had 136 recreation and tourism programs. There were 22 (16%) regular programs and 114 (84%) special events. Among the programs identified, approximately 37% of them were publicly managed, while 63% were privately managed. All of the programs were publicly accessible; approximately 21% of them were free to access, while 79% had an associated fee.

WASHINGTON COUNTY

Washington County had 49 recreation and tourism programs. There were 19 (39%) regular programs and 30 (61%) special events. Among the programs identified, approximately 18% of them were publicly managed, while 82% were privately managed. All of the programs were publicly accessible; approximately 35% of them were free to access, while 65% had an associated fee.

BENCHMARK ANALYSIS

The primary objective of the benchmark analysis was to identify similarities and differences between the benchmark counties (Putnam County, OH, Barry County, MI, Cedar County, IA) and the Indiana Uplands to understand possible reasons for the enhanced health and economy in the benchmark counties.

The Indiana Uplands region is home to the Hoosier National Forest, which includes 119,663.64 acres of federally managed land (IDNR, 2009). Out of the 11 counties, seven counties had Hoosier National Forest land ranging from approximately 465 to 31,621 acres, with an average of 10,876 acres between the seven counties. The acreage of federally managed land in the Indiana Uplands greatly exceeded the acreage of federally managed land in the peer counties. Only one of the peer counties, Cedar County, IA had federal land, which included the 68-acre Herbert Hoover National Historic Site.



Barry County, MI had the highest acreage of state managed land among the benchmark counties, consisting of 22,000 acres of state game and recreation areas. In the Indiana Uplands every county had state managed land ranging from 8,387 acres to 50,831 acres with an average of 23,677 acres. When the number of acres of state land per service area population of 1,000 was considered, there was more than eight times the land in the Indiana Uplands (1,044 acres per 1,000 people) compared to the average of the peer counties (123 acres per 1,000 people).

The total municipal park land of the Indiana Uplands region was similar to the average and median of the peer counties. On average, the Indiana Uplands region provided 27 acres of locally managed land per service area population of 1,000, compared to an average of 22 acres per service area population of 1,000 in the peer counties. Of the peer counties, Cedar County, IA managed the most park land at 995 acres, which led to an average of 54 acres per service area population of 1,000. Departments and agencies surveyed in Barry County, MI and Putnam County, OH, had less park land (497 acres and 117 acres respectively) leading to a lower level of service per 1,000 people (approximately 8 and 3 respectively).

The peer counties surveyed had more municipal trail mileage on average than the Indiana Uplands region. Barry County, MI had the highest trail mileage of all the counties surveyed, with 49 miles of trails including a 42-mile trail that ran through the entire county. Putnam County, OH did not manage any local trails, however, all park boards reported that they were in the process of developing



one-mile walking trails in their towns. Cedar County, IA had 9 miles of municipal trail and also mentioned that they were in the process of developing more trails. On average the peer counties had about 19 miles of trail. In comparison, nine of the Indiana Uplands counties were found to have existing trails ranging from .75 miles to almost 21 miles. On average the Indiana Uplands counties had about 7 miles of trail per county. When examined in comparison to the population, the peer counties had about 9 miles per 1,000 residents while the Indiana Uplands had approximately 4 miles.

ACCESS TO RECREATION FACILITIES

For this report, YMCAs were the only recreation facility considered. Of the 11 counties surveyed in the Indiana Uplands region, five out of the eleven counties had a YMCA located within the county compared to two out of the three peer counties surveyed. Based on this information, the peer counties had greater access (at 67%) to YMCA's compared to the Indiana Uplands Region (at 45%).

TOURISM PRESENCE

None of the peer counties surveyed had a designated tourism board, agency, or visitor center. Tourism, if managed at all, was likely managed by an Economic Development Alliance (Barry County, MI) or the Chamber of Commerce (Putnam County, OH). In Michigan, convention and visitors' bureaus are funded by motel taxes. Barry County, MI did not have many motels, thus they did not have a visitor's bureau. Although the peer counties surveyed reported attractions including local festivals, wineries and bars, outdoor recreation, and a National Historic Site, the peer counties did not actively promote tourism in their area. This is very different from the Indiana Uplands region, of which all 11 counties had a tourism board or visitor center that promoted recreation, festivals, and local events in the county.

SUMMARY OF BENCHMARK FINDINGS

The Indiana Uplands region had greater access to state and federal land compared to the peer counties surveyed, had a similar amount of locally managed park land, but had less trail mileage and YMCA access. Interestingly, Putnam County, OH had the best overall scores for the county health rankings but had the least acreage of state, federal, and local land as well as trail mileage.

Possible explanations for the better county health rankings in the peer counties could be attributed to the higher number of local trail mileage managed by county and municipal park boards and agencies, as well as access to YMCAs. Unlike state and federal land, local trails and YMCA recreation facilities are often more accessible to the population, offering a higher level of service. They may also attract rural residents to city and town centers who are looking for a more social and varied recreation experience. Local trails, for example, may link existing park land and recreation sites, encouraging residents to be more physically active. YMCAs also provide a variety of amenities, programs, and educational opportunities for people of all ages and ability. Unlike outdoor facilities, participation in recreation at a YMCA is not dependent on weather or season. YMCAs are open year-round and could be considered a more safe and accessible way to participate in recreation when compared to activities that commonly occur in state parks, such as backcountry hiking and mountain biking, which require prior skill, knowledge, ability, and equipment.

In this comparison, the presence of a tourism entity alone did not contribute to the overall improved economic situation of the peer counties since none of the counties seemed to actively promote local, state, or federal land, recreation activities, or other local attractions. Given this it seems likely that another variable is responsible for the higher income and lower poverty rate of the peer counties compared to the Indiana Uplands region.





CIVIC ENGAGEMENT

The focus groups yielded a variety of findings about use of and opportunities for the parks, public lands, trails, facilities, and programming in the counties and region.

USE OF RESOURCES, FACILITIES, AND PROGRAMMING

When asked if people visited the parks, public lands, or trails in the county, stakeholders in all 11 counties felt that people did. Similarly, when asked if people used the recreation or leisure facilities or participated in recreation programs, the stakeholders in all counties also responded that they did. Local parks were mentioned by eight counties as some of the places that people visit in the county. Trails also came up among a large number of counties. Many of the trails mentioned were in Hoosier National Forest, but several were well-known trails in the region such as the B-Line, Knobstone, Milwaukee, and Tecumseh trails. State parks, state forests, the Hoosier National Forest, and nature preserves were other places that several counties stated residents visit. As for visiting parks, public lands, or trails in the region, nine counties noted that people visited state parks. They also mentioned trails in Bloomington, Hoosier National Forest, and the Knobstone and Tecumseh trails. They brought up visiting other counties and cities within those counties as well. IDNR leadership shared that among their properties, Goose Pond Fish and Wildlife Area, Monroe Lake, Morgan-Monroe State Forest, and Yellowwood State Forest were popular.

Among facilities, sports facilities, specifically baseball/softball fields and basketball courts, were brought up among five or more counties as places residents visit in their county. Campgrounds and swimming pools were also mentioned as places residents in five counties frequented. The popular programs across counties

included boating races and opportunities, county festivals, and races such as 5Ks. The counties were varied in their perceptions of facilities and programs that residents participated in across the region. Three counties noted interest in historic facilities such as bridges, a mill, and a memorial, and another three mentioned trains. As for programming, events such as a covered bridge festival or a limestone symposium, and fitness opportunities like cheer camps and the Hilly Hundred, drew people to other places in the region.

FACTORS CONTRIBUTING TO USE OF RESOURCES, FACILITIES, AND PROGRAMMING

Several factors were identified that facilitated the use of the resources, facilities, and programs in the counties. They included low cost, safety, health and wellness, natural beauty, recreation and sports opportunities, and variety and quality of opportunities.

Low Cost

Ten of the eleven counties thought that cost was not an issue in order to access the resources, facilities, or programs available. In Daviess County, one stakeholder shared *“I don’t think cost is a barrier.”* Someone from Dubois County highlighted that *“there’s very little that you would pay for, unless there’s an organized activity.”* This sentiment was affirmed by an Owen County stakeholder who said that *“most everything to get into, other than the two DNR, are free.”* When there were costs, the opinion seemed to be that they were reasonable. For example, a stakeholder from Washington County stated, *“I think most things are very affordable.”* In Crawford County, one stakeholder said that *“the low cost would be a motivator.”* While the availability of free and low cost opportunities appeared to be a widespread motivator for use, several counties noted that fees for state parks or other activities could be a barrier depending on the economic status of the individual or household.

Safety

All of the counties felt that overall their parks, public lands, trails, facilities, and programs were safe. One Dubois County stakeholder shared *“I think overall, what I know, each of the communities are looked at as safe places.”* Another stakeholder from Dubois County expanded on this stating *“I would think if we took some polls of people in Jasper, they would feel safe anywhere in the county.”* According to a Martin County stakeholder, *“it’s a safe network of facilities.”* One of the reasons that stakeholders in the Indiana Uplands seemed to feel safe, was, in the words of a Brown County resident, *“we have very few incidents or safety concerns.”* A Lawrence County resident agreed stating *“I think we’ve had more injury downtown on the streetscapes than out on the trail or in the parks.”* Among the few issues mentioned were some attacks on the Milwaukee trail, some domestic violence issues, an occasional drug or alcohol related incident, or inherent dangers related to recreating outdoors.

Four of the counties (Crawford, Dubois, Martin, and Owen) mentioned that there was law enforcement presence increasing the safety of specific sites, or in the case of Crawford County at the Marengo Underground 5K. Interestingly, the same four counties also noted that law enforcement was not at all sites or enough. For example, a Dubois County stakeholder shared *“we don’t have enough police officers all the time.”* Stakeholders in both Dubois and Lawrence counties mentioned that residents in the community also worked to keep an eye out for the safety of others. Orange, Owen, and Washington counties noted that facilities were well lit. One Washington County resident stated, *“most of our parks are lit up like Fort Knox.”* However, three counties (Greene, Orange, and Owen) felt that lighting at specific places could be improved. Overall, participants in the focus groups felt comfortable visiting their park and recreation resources and participating in programs.

Health and Wellness

Eight of the counties brought up that opportunities for health and wellness are what motivated people to use the parks, public lands, trails, facilities, and programming in the county. A Daviess County stakeholder noted that *“health and wellness is, I think, a big motivator.”* Further, a Washington County stakeholder said *“I think on the walking trail, Anytime Fitness, YMCA programming, it’s absolutely health. It’s a major part of it.”* Six of the counties noted that fitness or exercise specifically were the motivators. For example, a Greene County stakeholder shared that *“a lot of people go to Humphrey’s Park in Linton just to exercise,”* while a Daviess County stakeholder mentioned that *“we actually started a walking-jogging club on Saturdays at West Boggs Park....and that’s been picked up very well.”* Two counties (Dubois and Monroe) also expressed that mental health and wellbeing was a motivator. A Dubois County stakeholder shared that *“people are realizing how important it is for mind and physical wellbeing and stressing how important that is for life longevity and things like that. I think that is a key factor for the people to come join our parks.”*

Natural Beauty

Six of the counties felt the natural beauty of the area was an important motivator to visitation.

A stakeholder from Monroe County shared *“that natural beauty itself in general is part of what sets apart our part of Indiana from the rest of it. You know, because... you sort of want to go outside.”* In some cases, the stakeholders discussed specific parks. For example, one stakeholder underlined the beauty of Cooper’s Park in Owen County due to its location on the river, while another person highlighted the beauty of Delaney Park in Washington County. Two stakeholders shared that the beauty of Owen County was their reason for staying in the area. A stakeholder from Martin County stated that *“the photography is just great in this county”* suggesting that the beauty brings people out specifically to take photos. Overall the stakeholders emphasized the general beauty of the county in their comments.

Recreation and Sports Opportunities

The opportunities for recreation and sports emerged as a motivator to visit parks, public lands, trails, and recreation facilities. Brown County and Greene County stakeholders emphasized the importance of recreation as a motivator. A Greene County stakeholder shared *“recreation in general, they just love it here.”* Six counties discussed specific recreation and sports activities that brought people to their counties. Among these activities were birdwatching, boating, camping, fishing, hiking, horseback riding, hunting, mountain biking, skateboarding, and swimming. A Martin County resident shared that *“people come to visit for the boating, fishing, and camping,”* while a Greene County stakeholder noted that the county *“brings in people from other countries, to be honest, to see the birds.”* The opportunities for specific recreation and sports activities appeared to be a draw to the region for at least half of the counties in the study. DNR leadership also noted the draw of outdoor recreation. One stakeholder agreed with the popularity of bird-watching stating *“we frequently get, seems like every year we get one rare bird. It’s amazing how quickly the word spreads, and they just converge on the place.”*

Variety and Quality of Opportunities

Participants across six counties noted that the variety of opportunities was a draw. *“There is a diversity of facilities available to the public”* (Lawrence County). A stakeholder from Dubois County expanded on this, noting that not only were there many things to do but they also appealed to different age groups; *“I think another contributor is we all have variety...I think there’s some things for every age and age group to do.”* Another stakeholder from Dubois County highlighted that the opportunities were available to different socioeconomic classes as well: *“there’s plenty to do without spending a ton of money.”*

Similarly, the participants discussed the quality of the resources available. A Brown County participant shared *“I also think it is the quality. Our bicycle trails, we are bronze ranked in the county and I think we’re in the top ten or twelve bicycle destinations in 48 states.”* A Dubois County stakeholder noted *“they’re all nice. They’re well-kept. They’re convenient.”* The quality of the spaces, especially when combined with the variety of opportunities facilitated use of the park, recreation, and tourism resources and facilities in the counties.



BARRIERS TO USE OF RESOURCES, FACILITIES, AND PROGRAMMING

Some barriers to the use of the resources, facilities, and programs in the counties were identified as well. They included people's awareness of opportunities, marketing, proximity, infrastructure, and accessibility.

Awareness

A challenge that came up in nine of the county focus groups was that residents and visitors alike did not know about or were not able to access information about the park and recreation resources. As one Daviess County stakeholder shared, *"a lot of it's just the wherewithal of people, just knowing what's available to them."* Stakeholders felt that residents did not seem to know what was in their county, let alone others. A Monroe County stakeholder explained *"even people that say they grew up in Bloomington have never been to Hardin Ridge Recreation Area or knew that it was there or that it was Hoosier National Forest...and that's locals, same county."* Moreover, according to a Monroe County stakeholder, *"a lot of Bloomingtonians do not know Southern Indiana very well...we're always, even those of us that are pretty knowledgeable, we're like, what county is that in?"*

One challenge to getting information was internet access. Four counties (Greene, Lawrence, Orange, and Washington) suggested that there was not reliable access to internet across the county. A Greene County stakeholder shared *"it's also access. Broadband access. Broadband is weak."* Even if internet was accessible, many study participants highlighted that information was not always readily available online. A Dubois County stakeholder brought up that *"there is not one central location to go."* An Orange County stakeholder also felt this way stating, *"there's all these things going on that we do not have a central website, for example, that you can go to and find out all this information."* The Dubois County participant also noted that even if information was available online, such as on a tourism website, it was not a likely place that residents were





frequenting for information. *“I think maybe you guys list on your website, on the tourism website but people don’t necessarily go look at tourism because they live here.”* Getting information to outside visitors came up as a challenge as well. One study participant from Crawford County lamented about the amount of time it would take a tourist to find one of the lodging options in the county and indicated they would be more likely to book one of the mainstream, easy to find hotels in another county.

Marketing

Whether the marketing of opportunities in the counties was poor or it did not exist, it came up among nine counties as a barrier to visitation. A Crawford County study participant stated, *“I think in general, our advertisement of our county assets period are pretty minimal.”* In some cases, study participants highlighted specific assets that needed marketing, such as a new exercise trail (Daviess County), a blueberry farm (Greene County) or the public park (Crawford County), while others simply noted that marketing was needed. Washington County emphasized that marketing was not designed to attract outside visitors. One stakeholder there underlined that *“they’re basically set up for local people. We’ve not advertised enough to get out of county people in them.”*

One issue Greene County was facing was how to market. A stakeholder there mentioned *“to find one method of communicating, that’s hard to do. It’s very costly.”* They discussed the lack of newspapers, communication via gas station flyers, announcements at church, Facebook, and a new website button they had developed which highlighted events. The issue seemed to be that different audiences needed different forms of communication, which was difficult to manage without staff and a large funding base. A stakeholder in Lawrence County felt that the community needed to help promote opportunities. This person shared that *“part of it is a lack of the community effort to promote it here.”* In the counties that were already actively marketing, they found that different local entities had their own brochures, maps were only available on webpages, materials given to share were out of date, or the appearance of materials was outdated.

Marketing continued to be mentioned throughout the groups and ideas to disseminate information were suggested such as a web-based application (Crawford and Monroe counties), maps – specifically for trails (Lawrence, Monroe, Orange, and Washington counties), search engine optimization (Lawrence and Washington counties), a centralized webpage for county opportunities (Orange County) or for all county opportunities (Monroe County), brochure updates (Dubois County), a kiosk or information board with QR codes (Lawrence County), and road signage (Orange County).



Proximity

Parks, public lands, trails, facilities, and programs are not always nearby, making them more difficult to access. This appeared to be especially true in the Indiana Uplands. Seven counties mentioned that either specific sites or all sites needed to be driven to, in order to access. In the words of a Crawford County stakeholder, *“I don’t know exactly the mileage but it’s not easy. It’s not easy to get to one spot. It takes 20 minutes driving hard.”* In Daviess County a stakeholder explained *“the issue we have at West Boggs is that our main entrance is in Martin County and we’re at the extremity on the east side of the county. It does make it hard for some Daviess County residents to get over there easily to access the facility.”* Another county (Crawford) shared that their resources were “spread out” making it challenging for some.

Despite the need to drive, in at least three counties, stakeholders did not view this negatively. Instead proximity for specific sites was deemed accessible or within certain towns fine. A Dubois County participant noted that *“I can’t imagine any resident would have to drive very far to have access to a nice park.”* In Owen County a participant stated, *“everything pretty much has pretty good access...I can’t think of anything that doesn’t have pretty good access...because most everything is off of a major highway or something.”* Despite this, the difficulty in getting to places appeared to be a deterrent.

Infrastructure

Given the need to drive to many of the resources, facilities, and programs occurring in each of the counties, parking was necessary. However, five counties noted that parking could be an issue. When speaking about the Milwaukee trail in Lawrence County a stakeholder shared *“the problem at the very beginning, there’s not any actual parking.”* In Washington County, there was a similar issue. One stakeholder noted *“I will say one thing about Riley’s Place. The parking is a little annoying. There’s no parking lot.”*

Other modes to get to parks, public lands, trails, and facilities were also lacking. Five counties mentioned a need for sidewalks to be able to access locations. A Washington County participant noted that *“we need more sidewalks in town for people, tourists, and locals.”* Furthermore, in Greene County a stakeholder described that *“there’s not sidewalks for kids to get in town to the pool. The only way to get there is down a big hill, which is not very safe with traffic, so those kinds of things would be beneficial.”* Similarly, a need for complete streets came up in Dubois County, however, it was noted that the Mayor of Jasper was working on it. Public transportation was also a challenge in at least four of the counties (Davies, Lawrence, Monroe, and Orange). A Brown County stakeholder shared that *“most everything has to be driven to. There’s currently no other access, bicycle, I guess depending on how determined you are.”* In Orange County, a stakeholder noted *“we really lack, well we have zero public transportation. That would prohibit people from getting place to place to access some of these.”*

Finally, five counties identified connectivity between towns or between locations as a barrier to visitation. A Lawrence County resident identified that *“it’s not real conducive to going to one location and you just funnel and feed into another location that feeds into another. You have to almost make a point of going to A, B, then C.”*

Accessibility

Accessibility was a recognized issue among six counties. A Martin County stakeholder emphasized that *“ADA compliance is a big issue.”* Despite recognizing their inaccessible sites, five of the counties had sites with some level of accessibility or were finding strategies to make their places more accessible. For example, in Greene County it was noted that accessibility *“might be a barrier for someone who was handicapped, like the Sculpture Trails. That’s not something they could do,”* but the stakeholders also shared that the founder of the trail had *“been taking people on golf cart rides. He has tried to make it more accessible.”* In terms of outdoor recreation, two counties (Brown and Monroe) admitted that it might not be possible to overcome accessibility challenges given the type of trail and weather patterns. In Monroe County a participant acknowledged that *“not all trails are handicapped accessible but that’s just kind of the nature of it.”*

COMMUNITY NEEDS

The focus group participants were asked for opinions on the future needs for parks, public lands, trails, recreation and tourism facilities, and recreation and tourism programs. Some frequent themes emerged across the counties including more parks and trails, a need for sports and recreation facilities, and a need for bike infrastructure.

Parks and Trails

While several of the counties discussed challenges such as enough land, funding, or access, at least six counties vocalized interest in having new parks. A variety of new park ideas emerged including acquiring the Avoca Fish Hatchery (Lawrence County), acquiring the Williams Dam Campground (Lawrence County), developing a quarry park (Monroe County and Lawrence County), creating a city park with trails to other parks (Orange County), and a new little park (Owen County).

Interest in trails was found in ten of the counties. Counties were looking for connections, whether it be to their downtowns, to hospitals, between parks, to long distance trails, or to other counties. Several specific ideas emerged in the focus groups and included:

- Re-establish Flags of the Nation trail in Brown County, IN (Brown County)
- Trail to connect Deer Run Park to Nashville, IN (Brown County)
- Trail connecting the Washington, IN trail to Washington residents (Daviess County)
- Trail in Linton, IN (Greene County)
- Trail connecting Linton, IN to Goose Pond Fish and Wildlife Area (Greene County)
- Expand and connect trails across Greene County (Greene County)
- Trails outside of Bedford, IN (Lawrence County)
- Trail connecting Avoca Fish Hatchery to Bedford, IN (Lawrence County)
- Trail connecting Bloomington, IN to Bedford, IN (Lawrence County)
- Trail connecting New Albany, IN to Bedford, IN (Lawrence County)
- Trail connecting Brown County, IN to Lawrence County, IN (Lawrence County)
- Trails connecting the Hoosier National Forest parcels in Lawrence County, IN (Lawrence County)
- Trail to connect Spring Mill State Park to Hoosier National Forest (Lawrence County)
- Trail connecting the Milwaukee trail to Hindostan Falls (Lawrence County)
- Trails to connect Loogootee, IN residents to the park in Loogootee (Martin County)
- Trails around Shoals, IN (Martin County)
- Horse trails (Monroe County)
- Trails for runners that are five to ten miles in length (Monroe County)
- Trails connecting towns in Orange County, IN (Orange County)
- Trail connecting to Brown County, IN (Orange County)
- Trails in Orleans, IN (Orange County)



In addition, three counties (Crawford, Lawrence, and Washington) had an interest in continuing to look at abandoned railways as places for trails. There was also an interest in specific types of trails; Brown County and Lawrence County had interest in water trails, while five counties wanted bike trails specifically.

Sports and Outdoor Recreation Facilities

A variety of sports and outdoor recreation facilities were brought up when focus group participants were asked what they would like to see in the county. Three counties (Brown, Dubois, and Washington) mentioned disc golf. Brown County and Dubois County were actively working on developing more courses for the tourism value. A Dubois County stakeholder shared *“we need to have at least three in Dubois County to attract a tournament.”* A Washington County participant showed interest in a disc golf course as well. *“Frisbee golf is another one we hear about. Disc golf. Things that are popular, but you don’t have the facilities.”*



Three counties (Crawford, Daviess, and Dubois) felt that parks with sports fields and courts such as baseball, soccer, basketball, and lacrosse would be helpful. A Dubois County stakeholder shared *“something we don’t have in the county but are interested in is lacrosse. Lacrosse is growing.”*

Five counties mentioned interest in a swimming pool. One Crawford County stakeholder stated *“it would be awesome to have a pool for our kids. A park with a pool.”* Two counties highlighted the need for an indoor pool specifically which could be used year-round. There was also interest in a water park among two counties. A Brown County participant jokingly said, *“give me an inner tube and a lazy river”* however, an Owen County stakeholder noted *“we’ve had a lot of requests for water parks when we were doing some surveys locally a few years ago.”*



Finally, three counties (Brown, Crawford, and Orange) recognized the need for a recreation center or gym. An Orange County participant explained, *“there’s no gathering place is what I’m trying to say. No central hub for wellness and working out. There’s no gym. There’s no fitness center. There’s no park.”*



Bike Infrastructure

Safety while riding bikes, was brought up by eight of the counties in the focus groups. They all expressed a feeling of not feeling safe either due to traffic or not having a specific place set aside for bike riding. A Greene County stakeholder noted *“that’s one thing that we don’t have very good places to ride bicycles, not on heavily traveled routes. Safety is an issue with the traffic.”* A participant from Washington County agreed, stating *“I don’t ride them here in town, because, I said again, I don’t feel safe on the roads.”* A participant from Lawrence County explained that it was not traffic so much as the structure of the roads themselves: *“the roads are narrow. They’re hilly. They’re windy. No sight. Distance. They’re dangerous. Some people wonder why bikers wear such loud clothing. It’s so they’re seen.”* In two counties it was noted that parents do not let their kids ride as well. In Dubois County a stakeholder said *“you don’t want kids riding bikes...their parents won’t let them ride. That’s what I see. If they had safe ways, I think that would double or triple the use of all of our parks, if we just had that.”* Two counties (Lawrence and Washington) suggested bike lanes on roads as a solution. One of the counties (Lawrence) discussed Bloomington’s bike trails as a good way to provide places for bicycling and a possible opportunity to increase visitation. It was mentioned that *“Bloomington does have the Clear Creek trail, the B-Line, that are I think hugely popular. I think there’s a lot of potential that way...I think you’re right to provide some of those facilities. That would be fantastic.”* Two additional counties (Monroe and Orange) felt that bike trails would be a good idea to have.

HEALTH OPPORTUNITIES

Participants in the focus groups were asked about changes to park and recreation resources which could be made to improve the community’s health. About half of the communities (6) felt that better promoting the resources in relation to health and wellness could be important. In the words of a Daviess County stakeholder *“getting the information out there, the health and wellness correlation between parks and rec.”* Five counties emphasized the importance of getting people out and moving. An Owen County stakeholder shared that *“I encourage people. If nothing else, start walking.”* Four counties (Martin, Monroe, Orange, and Washington) felt the development of trails could be valuable for improving health. Three of them (Monroe, Orange, and Washington) specified bike trails in particular. Different programs were also mentioned. Three counties (Brown, Daviess, and Dubois) discussed walking programs, to give people an opportunity for a social connection. A Daviess County participant explained that *“a lot of people like to walk, but they don’t like to walk alone.”* Two counties discussed food related ideas. A Monroe County participant talked about promoting community gardens as another way to connect the community around healthy food habits, while a Washington County participant talked about working with Purdue to bring cooking classes to the community.



TOURISM OPPORTUNITIES

All 11 counties were asked about tourism opportunities for their counties and their region. Several ideas were prevalent across the counties. These included festivals and events, food and agritourism, natural features and outdoor recreation, the development of entertainment facilities, and the development of tourism amenities.

Festivals and Events

Many of the counties have festivals or events which draw former residents and tourists to visit. A total of ten communities talked about their events. A Crawford County participant shared *“we have some pretty good festivals. [The] 5K is pretty amazing.”* A Daviess County stakeholder highlighted the success of the Knights of Columbus drawing stating *“Radius did an economic impact of K of C drawing. And it was phenomenal. I am convinced, it opened their eyes of where to spend their money.”* Greene County stakeholders had a lot of pride in their events and shared that they brought back many former residents to their county. They noted that *“the largest Fourth of July parade that they hold in the state is over at Linton. They say our population goes from 5,200 to close to 40,000 in some years. It just depends on the turnout. It’s a big deal.”* In Lawrence County, beer festivals at Salt Creek Brewery were brought up as a draw for tourism. *“We can do ten beer fests every weekend nine months out of the year. Huge, huge draws. We’re going back to starting to run ones, a festival every month, at our place”* (Lawrence County).

Although the festivals that were mentioned were sources of pride and successful, a few challenges were mentioned. A Crawford County participant discussed the need for more help from the community to further develop the festival: *“with the festivals, you could do a lot more. With the festivals it’s the help.”* Other counties noted the challenge with capturing additional tourist spending. Owen County discussed trying to use festivals to get tourists in the downtown area, while Daviess County shared a need for more hotel rooms to get tourists to stay nearby.

In addition, six counties had ideas for future festivals which could bring people into their counties and the region. Greene and Monroe counties brought up the upcoming solar eclipse as a significant opportunity for programming in the region. A Greene County participant stated, *“the next eclipse, the next solar eclipse is going to go right through here.”*



Food and Agritourism

Many counties felt that there was an opportunity for food and agritourism. A Dubois County stakeholder succinctly stated: *“Agro tourism is something that’s probably not fully developed as it should be here. Could be.”* Eight counties discussed existing food and agritourism-related facilities and programs which were successful, such as wineries, craft breweries, farms, corporate factories, and farmers markets. A Dubois County stakeholder shared *“we have Lindauer Farms. They have a viewing room. They’re bringing in school kids in there. Every year they’ll have a day where it’s open and they get 900 to 1,000 people that come just to see the milking.”*

An additional five counties saw further opportunities for growth, given the resources of their county. In Crawford County a stakeholder talked about a facility from Iowa which could be replicated: *“we go to a pumpkin patch type thing. But this thing has grown and grown and grown. When I’m there, I’m thinking this is Crawford County. They have a barn and inside this barn is a huge corn pool. They’ve added to it so now you can take a slide and go down the slide into this corn pool. They expand, expand, expand every year and that’s very cool.”* In Daviess County the opportunity to share Amish culture with tourists existed. A Daviess County participant mentioned *“our main draw is the Amish population to view a different culture, but I guess there is always room for anything, not to limit it.”*

While all of the counties who mentioned food and agritourism seemed optimistic, Dubois County shared a challenge they had with working to develop agritourism. A stakeholder there explained *“agro tourism we’ve tried to work on for a couple of years but the farmers. We have turkeys, chickens. We can’t have any agro tourism to do with that because of the disease and things like that. That’s our largest industry in that area.”*

Natural Features and Outdoor Recreation

The counties recognized the value of their natural beauty and outdoor recreation opportunities. Nine counties brought up natural features that they felt had potential for tourism. An Orange County stakeholder shared, *“I think it’s a huge asset for us. The whole Hoosier National Forest is ours to use.”* In Owen County a focus group participant drew attention to the fact that one of their resources received recognition at the state level: *“the Cataract area, which is the Richard Lieber recreation area. Most of Cataract is in Owen County so we have the two falls, which they were voted two years ago the best falls in the state of Indiana.”* Lastly, in Greene County a participant emphasized the potential of their state land by mentioning that *“Shakamak State Park is one of the most visited per DNR in the state.”*

Ten counties acknowledged the many opportunities for outdoor recreation. In Martin County a stakeholder explained the monetary value of bird-watchers. *“Goose Pond is a good example of how low profile – there is nothing to buy and you can count license plates from all over the Midwest – Ohio, Illinois, Kentucky, Tennessee. Right now, the sandhill cranes are there. There is nothing to buy but there are thousands of people who go in and out every day taking pictures. Well when they go to Linton, they buy pizza, gas, bread and butter, whatever... I think people can underestimate nature lovers, but they buy the same stuff as everybody else.”* A Brown County participant noted that camps drew visitors to the county: *“We are a destination for camps... kids from all over the state come for camps. I think we have 20 in our county. They don’t pay taxes but any given moment in the summer there are 1,500 kids here”* In Lawrence County a variety of trail types were suggested as an opportunity for tourism. *“Well, certainly the biking, hiking, walking trails. I think that would be huge in the region because it’s something that people are moving towards and utilizing so it’s a popular thing to do.”*

Camping in particular also came up across many of the counties. A Washington County participant noted the tourism opportunity in camping by stating *“I’d like to see Washington County with more camping. That’s a huge industry.”* Another participant agreed, stating *“yeah, camping can bring a lot of business to the community.”* A Dubois County participant mentioned the value of camping to Hoosier National Forest: *“We’ve seen an explosion in the use of our trails and campgrounds in the past 10 years...Hoosier used to be primarily people in that county but now we’re seeing a lot more tourism from Indianapolis, St. Louis, and Chicago area.”*

A Brown County stakeholder made the connection between sports tourists and camping and suggested it was probably important to locate camping near disc golf courses since they drew in so much tourism. The stakeholder explained that *“camping is important because they based their destination on how close the [disc golf] course is to camping.”*



Entertainment Facilities

Entertainment facilities emerged as a theme across communities. Five counties discussed existing entertainment facilities or facilities under development that had been or were expected to be successful. The new performing arts center in Brown County, Switchyard Park being built in Monroe County, and the recently purchased Salem Speedway in Washington County all came up as opportunities for tourism potential. Five counties also mentioned entertainment facilities that could be developed to better draw tourism to their county or the region. The most prevalent among these ideas was the need or desire for a music venue in southern Indiana. This was brought up by four counties (Crawford, Greene, Daviess, and Monroe), while a fifth county (Owen) did feel that residents were looking for more concert opportunities. Crawford County was thinking on a smaller scale for their music venue. A participant in their focus group stated, *“we need an amphitheater for tourism. That’s my ultimate thing, the reason being for the Labor Day weekend the last two years I’ve spent \$8,000 on a stage.”* Their vision was more along the lines of serving their county. Greene County was on the opposite side of the spectrum. A participant in the focus group there said *“I think that a music venue here. Several people have talked about it. A place to have massive concerts. That is an opportunity here in Southern Indiana.”* Other participants in Greene County agreed and one jokingly stated, *“bring Kenny Chesney on.”* Both Daviess County and Monroe County participants were also thinking along the lines of a large venue to bring tourists to the region, and a Monroe County participant expressed a desire that it be an outdoor venue. Two other entertainment facilities were mentioned but only by one person in each county, these included a stadium (Greene County) and a riverboat casino (Owen County).

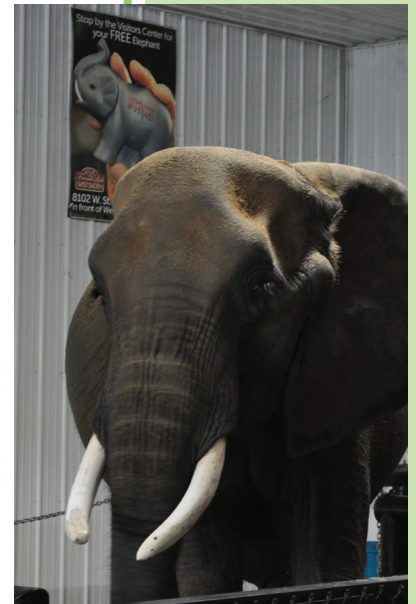
Tourism Amenities

Tourism amenities, specifically lodging, restaurants, and shopping, were found to be instrumental to tourism opportunities in the counties and region. Several counties highlighted the importance of having restaurants. In Brown County one stakeholder noted *“in the warmer months there is someone nearly every day from out of town coming to play disc golf and when they get done, they go in town and eat and drink at Big Woods or wherever.”* Five counties felt that restaurants, or in a few cases nicer restaurants, were something they needed to develop to entice tourists. An Owen County stakeholder shared *“we’re short on really good restaurants. We’ve got every fast food in the whole wide world. That’s not always what people are looking for.”* Owen County also mentioned that they are a riverfront development project area, which enables more efficient economic development and would make it possible for them to attract restaurants more easily in the future. Similarly, shopping areas were something that came up. A Dubois County stakeholder discussed their own tourism experience and the need for restaurants and shopping to develop tourism: *“I travelled a lot of places to go hiking. I drive to hike. When I’m there I spend money. I stop off at the local stores. I stop at the restaurants. We have groups that we take and go do this stuff. When you look at drawing people into the county, you give them that option.”* Three counties (Crawford, Orange, and Washington) felt that shopping needed to be developed. A Crawford County participant explained *“I want to go to some shops. So that tells me that I have to drive to French Lick to go to some shops. Or go to Jasper. I can’t go to shops here besides the Dollar General.”*

Another big tourism amenity is lodging. Several of the counties did not have lodging or felt it was important to develop opportunities for lodging in order to maintain tourism dollars. A Martin County participant explained that they have an opportunity, given their location, but do not have the lodging to be able to get tourists to stay. *“If people were going to French Lick or Holiday World for the day this would be the perfect place to stay but there is nothing here other than natural scenic beauty. No places to stay or great restaurants that draws the attention of the tourists.”* Greene County also sought lodging, but a participant explained *“the other challenge in our county is to get an investor to build a hotel, we do not have zoning in this county. There’s nothing to protect their investment from a hog farm building next door.”* Although Daviess County already had some lodging, a participant in their focus group shared *“we had a study done several months ago that said we probably need additional 250 rooms in Daviess County.”*

PARTNERSHIP OPPORTUNITIES

The study also highlighted a variety of partnership opportunities that participants thought would benefit the community's health, economy, or overall quality of life. Six different counties talked about partnerships with various non-profit interest groups. In some cases, they talked about how these groups had already helped develop facilities or programs, but in other cases there was discussion about opportunities if there were to be a partnership developed. In Brown County the stakeholders shared that a Bloomington disc golf club *"came over here and literally asked us to build this course, helped us build it because they couldn't get time on the course. They were trying to attract a tournament and they thought if they had 1-2 more places they could."* Five counties were excited about the idea of working with Indiana University entities to meet some of their needs. Crawford County had interest in working with the National Center on Accessibility and on grant writing. Dubois County was working with IU on health studies. Martin County had connected with a researcher in the Department of Folklore and Ethnomusicology on a photography project. Monroe County discussed a project between IU and Cicada Cinema. Washington County felt that the focus group for this project was a good start to working with IU. In addition, four counties (Daviess, Dubois, Martin, and Monroe) discussed working with health and wellness providers to prescribe parks as a health solution, develop and implement programs, and assist with trail development. Four counties also discussed partnerships for funding to assist with local projects and needs. Lastly, five counties emphasized the importance of regional partnerships and discussed regional groups that they had participated in that tackled cross-promotion and advertising, shared events, and shared points of pride.





RECOMMENDATIONS

The data revealed specific actions that can be taken to assist communities in the Indiana Uplands with improving economic sustainability, health, and quality of life.

1. DEVELOP TRAILS

The 11 counties located within the Indiana Uplands region have an opportunity to improve community health by investing in readily accessible walking and biking trails. Trails were of interest in 10 of the counties during the focus groups. County stakeholders saw new trails as an opportunity to provide easy access to local fitness and social opportunities. Research has found that every dollar invested in trail construction and use results in a direct medical benefit, reducing individual medical costs by approximately \$2.94 (Wang et al., 2005). Thus, building local trails could be key to improved health. In addition to simply developing trails, trails that connect local parks, state parks, national forests, residential areas, and other counties emerged as a desire in eight of the county focus groups. Many saw it as a great opportunity for residents to enjoy, but also as an opportunity for tourism. Long-distance trails in particular were found to be sparse in the Indiana Uplands region and should be an area of focus in order to increase tourism and spending in the region. Specifically, long-distance trails capable of accommodating pedestrians and bicycles are likely to be the most successful, according to the focus group data. A study examining the Virginia Creeper Rail Trail spanning two counties in Virginia found that tourists spent \$1.2 million in the two-county area (Bowker, Bergstrom, &



Gill, 2007), while a study of the Ohio and Erie Canal Towpath Trail which covers 87 miles estimated trail user spending at \$6.9 million (Rails-to-Trails Conservancy, 2018). Although the impact of the amount of money spent varies by the size of the county and existing economy, Moore, Gitelson, and Graefe (1994) found that on a rural trail, visitor expenditures had a higher impact than trails in other areas. Beeton (2010) identified that the Murray to the Mountains Rail Trail in Victoria, Australia aided local businesses, and that those along the trail route attracted trail visitors, especially the wineries and restaurants. Further, a study examining the Monon Trail in Indianapolis, IN found preliminary evidence that property values of properties neighboring long-distance trails and greenways can rise (Lindsey, Man, Payton, & Dickson, 2004). In order to ensure long-distance trails maximize the economic benefits to the region, the development of a comprehensive trail plan is recommended. Trail development that aligns with community development and actively plans for points of interest (e.g., restaurants, lodging, shopping, etc.) along the trail will be key to its success. Building long-distance trails and greenways that connect to locations could be an important contributor to economic sustainability in the Indiana Uplands region.

Another form of long-distance trail which emerged from focus group conversations were water trails. A second plan assessing opportunities for water trails in the region could be useful. The National Survey on Recreation found that as of 2009, 41% of the United States population that was 16 and older swam in natural waters, 36% participated in boating, 34% participated in fishing, 23% partook in motorized boating, 12% participated in canoeing and kayaking, and 8% engaged in waterskiing (Cordell, Green, & Betz, 2009). These numbers suggest that there is a large number of people across the United States who enjoy participating in water-related outdoor recreation activities. Outdoor recreation activities were found to be a motivator to visitation in the focus groups and an area of interest for tourism development in the Indiana Uplands region. Properly assessing what opportunities exist for the creation of water trails and the interest of the counties along the trail would be integral. If the findings were positive, a water trail in the region could be a unique asset.

2. INCREASE THE NUMBER OF LOCAL PARKS

There is a need to increase the number of local parks in the Indiana Uplands to improve access to recreation and leisure opportunities for the improvement of health. The public, non-profit, and private conservation and recreation area data highlighted that the majority of land in the region is state land. While state land is important for conservation of resources and providing opportunities for recreation, these types of sites can be more difficult to access, and Indiana state parks specifically have an entry fee. Local parks which are easily accessible by community members could be valuable to improving the health of the 11 counties. The benchmarking analysis highlighted the fact that the peer counties lacked state land compared to the Indiana Uplands, but one county had significantly more municipal land and exceeded the 11 counties in health ratings. Further, research has found that individuals who spend at least 9 hours a week in public green spaces held more positive views of their local community (Cox, Shanahan, Hudson, Fuller, & Gaston, 2018). Increasing local parks could be important for both community health and quality of life.

In light of data from focus groups, funding and staff will likely be challenges to developing new local parks. Identifying funding opportunities to make new developments will be important. If developing new parks is not possible, considering non-traditional green spaces for recreation development could be an opportunity to improving community health. Cities across the nation and world are embracing cemeteries for public use by incorporating natural areas, walking trails, and arboretums into existing design and designating space for passive recreation as well as special event programming. Encouraging public use of these locations could have a positive effect on the health of the community by creating more opportunities for passive and restorative recreation and increasing residents' access to green space. According to Harnik and Merolli (2010) the most common activities in cemeteries include running, picnicking, bicycling, jazz concerts, bird watching, dog walking, bench sitting, trails, grave rubbing, tours, art classes, ghost hunting, event space, Halloween programs, theatrical performances, and scavenger hunts. Using these spaces when possible can offer additional opportunities for residents to come together to allow for improved mental and physical health.





3. INCREASE THE NUMBER OF RECREATION AND AQUATIC CENTERS

Counties that do not currently have a YMCA or a similar recreation facility should consider investing in one. Recreation centers support the physical, social, and mental health of communities by providing a central location that offers a variety of recreation activities and programs year-round, as well as promoting healthy lifestyles through education. The Owen County focus group highlighted the popularity of their YMCA and the distance that members were willing to drive to access the facility. In other focus groups, stakeholders displayed disappointment at not having a consistent gym or recreation center to go to. Xiong and Zhang (2016) found that frequent recreation and community involvement contributed to quality of life in young adults. Providing opportunities for frequent recreation and community engagement through recreation centers could be valuable for improving health and quality of life in the Indiana Uplands.

The development of aquatic facilities was also brought up in five focus groups. Although less than half of the counties were looking for this type of facility, it is important to note because the needs of the counties were widespread, and this was more salient than any other facility mentioned. The development of community pools could have several important health and quality of life implications. Pools create an opportunity for community members to come together and are able to serve all ages. Moreover the Centers for Disease Control and Prevention (2016) reported that there were 3,536 unintentional fatal drownings in the United States from 2005-2014, which averages to 10 deaths per day and emphasizes the need for water safety opportunities. Developing pool facilities would give communities opportunities to improve social connections, physical health, and ultimately quality of life.

4. ASSESS ACCESSIBILITY OF EXISTING RESOURCES AND FACILITIES

Researchers studying disability have identified social integration as a key contributor to quality of life (Mahon, Mactavish, Bockstael, O'Dell, & Siegenthaler, 2000). For those with intellectual disabilities, recreation opportunities outside of the home were identified as important to social integration (Mahon et al., 2000). The ability to participate in opportunities for recreation and leisure is also a key facet of quality of life (The WHOQOL Group, 1998). The accessibility of parks, public lands, trails, recreation and tourism facilities, and recreation and tourism programming to those of differing abilities was a consideration for at least eight of the counties in the Indiana Uplands region. While three counties felt comfortable that their assets were accessible to all, five of the counties noted that some or all of their assets were not. Further, one county noted that although all of their park units were accessible, infrastructure to get to the site (e.g., sidewalks) was not developed. Those counties which brought up accessibility as a barrier to visitation appeared open to identifying solutions. In order to address accessibility, a comprehensive assessment of the accessibility of park and recreation facilities in the Indiana Uplands is recommended. In one county, a challenge was funding, which could be the case for others as well. In addition to the accessibility assessment, a database with grants which communities can apply for to assist them in developing accessible facilities should be created. Through actively developing accessible recreation opportunities, the Indiana Uplands could create better opportunities for all members of the communities to increase their quality of life.

5. DEVELOP TOURISM AMENITIES

The Indiana Uplands region is rich with parks and public lands, recreation and tourism facilities, and recreation and tourism programming which draws in tourists. A common problem among several counties was retaining tourists after they visited their intended destination. Overnight tourists are likely to spend more money than other types of tourists (Bowker et al., 2007) and should be the target market of the 11 counties. To encourage overnight visitors, tourism amenities (i.e., lodging, shopping, restaurants, and attractions) are necessary. Attracting private development in downtowns or areas with less amenities can be challenging. Owen County successfully obtained state status as a riverfront development district. This designation is characterized by policy (i.e., discounted and multiple alcohol licenses) aimed to attract businesses to an area. Eight of the counties within the region include access to a river and all have access to some level of a waterway. Exploring opportunities to obtain this designation for cities and towns that meet the eligibility requirements is recommended. A designation such as this would help incentivize business development.

Through a series of focus groups, Wilson, Fesenmaier, Fesenmaier, and Van Es (2001) identified important factors for the development of tourism in rural areas, including community leadership, local governmental support, strategic planning, cooperation and coordination between local government leadership and businesses, and support from the local community. Bringing together these groups within the counties to help solve the barriers to development of amenities is essential. The Regional Opportunity Initiatives, Inc. is a regional organization in the Indiana Uplands composed of industry leaders, organizations, partners, and local officials working toward the economic success and prosperity of the region. This organization could help facilitate information sharing among communities and tourism amenity development initiatives at the regional level and ensure that local efforts in the communities also aid the region as a whole.

6. INCREASE MARKETING AND AVAILABILITY OF INFORMATION ON REGIONAL AND COUNTY RESOURCES

In one focus group, a representative from Hoosier National Forest shared that in their visitor use monitoring studies they found that the top 15 zip codes of visitors were those immediately surrounding the forest. DNR leadership also stated that their visitors were in general within 50 miles of their sites. While many people may not want to drive far for recreation, another interpretation is that difficulty in obtaining information may lead out-of-town visitors to choose other destinations. Identifying ways to easily disseminate information and promote the region's many assets to residents and outside visitors is critical. Nine counties agreed that information dissemination and marketing were important and brainstormed ideas that would help.

One of the suggestions included a centralized website. Since many out-of-town visitors are using online research to determine their destinations, providing easy-to-find information on the internet could be helpful. A centralized webpage promoting conservation and recreation areas, recreation and tourism facilities, and recreation and tourism programming at the regional level should be developed. In addition to providing basic information on the regional resources and assets, the centralized webpage should include: (1) maps, (2) an event calendar, and (3) pre-developed trip itineraries.

Several counties brought up the need for trail maps specifically; however, maps of publicly accessible lands, trails, and recreation and tourism facilities in the region would all be useful. Including maps that help visitors identify available opportunities and how to access them is important for





facilitating a smooth, easy, and informed tourism experience. Furthermore, in a strategic doing stakeholder workshop facilitated by the Center for Rural Engagement in January of 2019, stakeholders felt that a centralized event calendar and pre-developed trip itineraries would be both feasible in terms of development and helpful in terms of attracting tourism to the region. Ideally, an event calendar would include special events occurring in each county which are likely to draw both regional and external visitors. Finally, pre-developed trip itineraries of key points of interest that are within convenient driving distance of each other are recommended for the website. Clustering local attractions like this can lead to sustainable partnerships that stimulate economic development (Briedenhann & Wickens, 2004). The trip itineraries could be based around tourist motivations such as adventure-based recreation, solitude in nature, or other visitor interests such as food, wine, and beer. They could also be targeted toward lifestyle, for example, family-friendly trip itineraries, romantic getaways, or exploration convenient for those with special needs. Radius Indiana, which leads eight of the Indiana Uplands counties in a partnership to improve branding and economic development in the region, has already initiated work on developing trip itineraries. Any project to create trip itineraries should be in collaboration with this organization. In the development of a centralized website, search engine optimization should be prioritized to ensure that county, city, and town searches lead to the webpage.

Another suggestion for marketing was the development of a web-based application (an app). A web-based application for the region could be marketed on the centralized webpage and could prove to be a useful tool. The application could highlight recreation and tourism facilities, what they have to offer, and their location. It could also promote recreation and tourism events. For residents living within the 11-county region, having access to an app that allows for notifications of local and regional events could increase visitation.

While a centralized webpage and application could be useful to many of the residents in the Indiana Uplands region, these forms of marketing are unlikely to reach all residents. Since approximately 30% of residents do not have access to internet, identifying other strategies for resource and asset promotion are necessary. A research study to better understand the preferences of residents in the region for receiving information would be useful to guide future efforts. Since marketing can come at a great expense to counties, having a clear picture of what is likely to be effective would be a good next step. These three marketing recommendations should help to create an environment conducive to tourism and improve economic sustainability.

7. COORDINATE FESTIVALS AND EVENTS

Ten of the counties enthusiastically discussed the festivals and events they host each year and shared some additional event ideas for increasing tourism in the area. Since these can all be drivers of tourism, creating a mechanism for coordination of the events would be helpful. Each county in the Indiana Uplands has a tourism organization. Developing a regional working group comprised of the leadership of these organizations that meets monthly or quarterly would help facilitate information sharing. Further, in the CRE-hosted strategic doing workshop in January of 2019, stakeholders were interested in identifying similar events in all of the counties, such as themed races, and creating a regional challenge to entice visitors to attend all. The stakeholders also saw an opportunity to partner with health and wellness providers for health education surrounding the event. A regional working group or a sub-committee under such a group could undertake such an initiative. The Recreation, Park, and Tourism Studies Department at Indiana University also has an active program in Tourism, Hospitality, and Event Management. Students in these classes could help with event coordination through the Sustaining Hoosier Communities program or another CRE initiative. Collaboration among the counties and with others would help to provide the visibility necessary to create awareness, whereas individual county efforts would be less likely to be successful (Meyer-Cech, 2005). In addition to coordinating existing events, thinking of new regional event opportunities could help to bring recognition to the region. According to Betz and Perdue (1993) rural recreation is not dependent on developed resources, but rather on the genuine experience provided by festivals and other opportunities. Through the creation of unique, memorable, regional experiences, tourism potential could further be developed to improve economic sustainability.

8. CONSIDER A MUSIC VENUE

Four counties in the Indiana Uplands (Crawford, Greene, Daviess, and Monroe) expressed interest in a music venue, while a fifth county (Owen) was open to more concert opportunities. There may be potential for the area to support a large music venue, and it could attract visitation to the region. Since both Brown County and Monroe County have projects in development (a performing arts center and Switchyard Park, respectively) it is recommended to wait and see how these two facilities develop and if they fulfill the need for a music venue in the region. If they do not, then market research to determine the potential success for a music venue should be pursued.

9. DEVELOP FOOD AND AGRITOURISM

Developing opportunities around communities' existing heritage and cultural amenities can increase user satisfaction and quality of life (Betz & Perdue, 1993). One element of heritage which was widely recognized among the communities was the area's food and agricultural assets. Despite awareness, most counties said this was an untapped area of tourism. Food tourism can be especially successful when linked to other assets. Research on the Murray to the Mountains Rail Trail in Victoria, Australia, found that wineries and restaurants received a lot of business from trail visitors (Beeton, 2010). When developing future food tourism assets, it is recommended to strategically cluster them near recreation resources to be beneficial to both. Where recreation and food-related tourism assets already are clustered, cross-marketing could improve the visitation to both types of facilities. Food-related trails such as wine or beer trails can be developed in their own right and have often been successful. They could bring branding to a region which may not have previously existed (Meyer-Cech, 2005). Identifying these assets that already exist in the region and considering ways to connect them into trails should be a first step. To better develop agritourism opportunities, it is recommended to initiate a research project which identifies a series of case studies in which agritourism has been successful in rural areas. Some key elements of agritourism from these case studies could be put together and presented to farmers in the region to develop awareness of the tourism opportunity. If successfully developed, agritourism has been found to have both economic and quality of life benefits and could be a good opportunity for the Indiana Uplands (Tew & Barbieri, 2012).

10. DEVELOP FUNDING RESOURCES

Funding in rural communities is a consistent challenge. To help the 11 counties in the Indiana Uplands better provide quality resources which can improve health and wellness, the economy, and quality of life, easily accessible resources to aid in funding acquisition should be developed. A grants database relevant to the Indiana Uplands region would be ideal. Regional Opportunity Initiatives, Inc. has its own grants database, and this could serve as a starting point. An Indiana University student intern or hourly employee could manage a grants database if an easy-to-use website was developed where grants sourced from other sites could be posted. In addition, identifying opportunities for grant programs that could be developed by prominent entities in the region to aid communities in the maintenance and development of their park, public land, and tourism assets could be valuable. Funding will be the key element to make changes to improve health, economic sustainability, and quality of life in the region.

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APPENDICES

APPENDIX A: COMPREHENSIVE DESCRIPTION OF THE STUDY METHODS

METHODS

The Indiana Uplands park, recreation, and protected lands inventory and opportunity mapping project included research and civic engagement. The research component comprised the identification of public, non-profit, and private conservation and recreation areas, recreation and tourism facilities, and recreation and tourism programming, their accessibility, and the benchmark analysis. The civic engagement piece of the study included focus groups with community leaders and park, recreation, and tourism stakeholders in the 11 counties to understand perceptions of resource use and opportunities in the Indiana Uplands region.

Research

Public, Non-profit, and Private Conservation and Recreation Areas

The identification of the region's public, non-profit, and private conservation and recreation areas and resources relied heavily on existing GIS databases. Data on public lands was collected through the IDNR Managed Lands and Recreational Facilities GIS layers, found on IndianaMap. Additional land data was collected through searches of the 11 county GIS webpages (see Appendix B for GIS database webpages). Search terms were developed by an Eppley Institute research team and revised after initial searches to better capture places. Some search terms were left incomplete to capture multiple forms of a root word. The final search terms included: camp, center, cemetery, cemetary, club, conserv, course, historic, land trust, museum, nature, theater, theatre, recreat, and sport. The county GIS data was difficult to convert from shapefiles to information usable for general understanding, thus this dataset was included in the maps and GIS database for the project, but not in the final set of public, non-profit, and private conservation and recreation areas. Data on cemeteries was collected through the Indiana Geographic Information Office (IGIO) Land Parcels and IDNR Cemetery Areas GIS layers on IndianaMap. To exclude family cemeteries, all cemeteries were limited to those 2 acres or larger. The lake and pond and river and stream data came from National Hydrography Datasets (NHD) from the U.S. Geological Survey (USGS) on IndianaMap. Information on wetlands was also collected on IndianaMap from the Wetlands of Indiana GIS layer developed through the National Wetlands Inventory (NWI) under the U.S. Fish and Wildlife Service (USFWS). Wetlands were limited to those 3 acres or larger to exclude seasonal wetland areas. Lastly, a Karst Springs GIS data layer from IndianaMap was collected. The data on cemeteries, lakes, ponds, streams, rivers, and karst springs was also difficult to convert from shapefiles to information usable for general understanding, so it was included in the maps and

GIS database for the project, but not in the final set of public, non-profit, and private conservation and recreation areas.

In addition, data on trails was collected through the IDNR Recreational Trails GIS layer, and information on railroads was collected from the Indiana Department of Transportation (INDOT) Active/Abandoned Rail Lines GIS data layer, both found on IndianaMap.

The public, non-profit, and private conservation and recreation areas and resources and trails data was categorized by ownership type and public access, when feasible. Ownership was categorized as either public or private. Public owners were defined as federal, state, regional, or municipal entities. Private owners were defined as individual or group owners not associated with government entities. Private ownership included nonprofit entities. Three levels of public access were used in the study: (1) Publicly accessible, (2) publicly accessible with fee, and (3) not publicly accessible.

Drafts of the public, non-profit, and private conservation and recreation areas and resources and trails data were brought to focus groups with stakeholders in the 11 counties and with leadership from the IDNR for review. Minimal edits were made to the data based on the conversations in the focus groups.

Recreation and Tourism Facilities

For the purpose of the study, recreation and tourism facilities were defined as a place, amenity, or piece of equipment provided for a particular recreation or visitor experience purpose (adapted from Google Dictionary, 2018). The definition was intentionally made broad to include the many forms of recreation and tourism available to residents and visitors in the 11 counties.

Recreation and tourism facilities were identified through a multi-method approach. Search terms were developed by an Eppley Institute research team and searched in the county GIS databases (see Appendix B for GIS database webpages). After initial searches, the terms were revised to better capture facilities. Some search terms were left incomplete to capture multiple forms of a root word. The final search terms included: camp, center, cemetery, cemetary, club, conserv, course, historic, land trust, museum, nature, theater, theatre, recreate, and sport. Those search terms that did not yield results were added to a list of terms developed by an Eppley Institute research team, which was then researched using the Google search engine (see Appendix C for a complete list of search terms). Data for recreation and tourism facilities was also collected through the IDNR Recreational Facilities GIS layer from IndianaMap and through a GIS database shared by Radius Indiana. The datasets were combined to develop the final recreation and tourism facilities dataset. Recreation and tourism facilities were then categorized by type of service provided using a framework developed the Eppley Institute research team (see Appendix D for the framework).

The recreation and tourism facilities data were categorized by ownership type and public access, when feasible. Ownership was categorized as either public or private, and access was categorized as publicly accessible, publicly accessible with a fee, or not publicly accessible.

Drafts of the recreation and tourism facilities data were brought to focus groups with stakeholders in the 11 counties and with leadership from the IDNR for review. Minimal edits were made to the data based on the conversations in the focus groups.

Recreation and Tourism Programming

For the purpose of this study, recreation and tourism programming was defined as arranging for or assisting people to be placed in a social, physical, or natural environment which may involve planning and organizing, assembling materials and supplies, arranging the use of facilities, providing leadership, or other actions that lead to the creation of opportunities for leisure (adapted from Bullaro & Edington, 1986, p.12).

Information on recreation and tourism programs was gathered through internet research, existing data, and phone contacts. The webpages of municipal park and recreation agencies, municipal tourism agencies, the IDNR, and local branches of the YMCA were searched for regular programs and special events occurring in the 11 counties. Programs from the GIS database shared by Radius Indiana were also included. Tourism brochures collected during focus groups were reviewed for additional programs. The municipal park and recreation agencies for which information could not be found through internet research were contacted by the Eppley Institute research team by phone to identify programs.

Drafts of the recreation and tourism program data were brought to focus groups with stakeholders in the 11 counties and with leadership from the IDNR for review. Additional programs which were mentioned during these focus groups were added to the data.

Benchmark Analysis

Benchmarking is a vital process that allows for a comparison of assets, programs, policies, and other criteria. Such comparisons are often used by agencies to evaluate themselves and, ultimately, plan for growth and improvement. The Eppley Institute selected three rural counties located in the midwestern region of the United States for a benchmark comparison of park land, trails, and opportunity for tourism. The counties were selected based on their percentage of rural population, demographics, health, and the economy. The intent was to identify counties that were similar to the counties in the Indiana Uplands in terms of demographics and percent of rural population, but were aspirational in terms of health and the economy. The health indicators selected for comparison included health outcomes

(overall county health based on longevity and quality of life), quality of life (overall health, physical health, and mental health as well as birth outcomes), health factors (health behaviors, clinical care, social and economic factors, and physical environment), and health behaviors (alcohol and drug use, diet and exercise, sexual activity, tobacco use, etc.) (County Health Rankings & Roadmaps, 2018). In addition, peer counties were selected that had a median household income higher than the average in the Indiana Uplands and a lower-than-average poverty rate.

The three counties selected for benchmark analysis were:

- Putnam County, OH
- Barry County, MI
- Cedar County, IA

To ensure consistent comparison across counties, population data from the U.S. Census Bureau (2017) American Community Survey 5-year Estimates were used. The American Community Survey ensured data was recent as well as standardized.

The indicators used to explore the relationship between parks and recreation facilities, departments, and programs as well as tourism opportunities in the counties included:

1. Acres of federal land (located in county)
2. Acres of state land (located in county)
3. Acres of locally managed park land (includes acreage reported by county and municipal park boards and agencies)
4. Locally managed trail mileage (includes mileage reported by county and municipal park boards and agencies)
5. Existence of a YMCA in the county
6. Existence of a county tourism board/visitor bureau

The data for federal, state, and municipal land and trails was gathered through internet research (Barry County, 2019; Barry County YMCA, 2019; Cedar County, 2019; My County Parks, 2019, Putnam County, 2014; Putnam County YMCA, 2019) and phone contacts with county government offices and park and recreation agencies for the three benchmark counties. The federal land data for the Indiana Uplands counties was gathered through the IDNR (2009) Recreational Facilities GIS data layer and the state land was gathered through IDNR (2019) Managed Lands GIS data layer. Phone contacts with park and recreation agencies were used to gather municipal land and trail data in the Indiana Uplands. Phone contacts were unsuccessful with the English Department of Parks and Recreation, Milltown Park Board, Dubois County Park Board, Bloomfield Park Board, Jasonville Park Board, Mitchell Park Board, Shoals Park Board, and the Salem Parks and Recreation

Department and when possible, IDNR (2009) Recreational Facilities GIS data and IDNR (2019) Recreational Trails GIS data was used to fill in missing information. Internet research was used to identify YMCA's and tourism organizations in all of the counties examined.

Descriptive statistics were used for comparisons between the benchmark counties and the Indiana Uplands. Since directly comparing information such as total acres managed by an agency does not provide a full picture of how much park land is available to residents, as it does not consider the service area population (i.e., how many residents share use of that park land), the total park acres per 1,000 people was computed.

This data was used to draw comparisons and gauge how well the Indiana Upland region's resources, facilities, and tourism assets compared with aspirational counties.

Civic Engagement

The civic engagement aspect of the study included a stakeholder focus group in each of the 11 counties, as well as an additional focus group with IDNR leadership to better understand perceptions of existing opportunities and future needs. Focus groups are a qualitative research method often used to explore a particular topic to better understand a situation (Morse & Richards, 2002). They have the advantage of allowing a researcher to observe the social interactions of the participants in addition to recording their statements (Krueger, 1988). They often elicit responses that may not have been expected or would not have come up without the social engagement element (Babbie, 2011). Given the exploratory basis of the study, focus groups were the best method for data collection.

Focus Group Measures

A set of questions for the county focus groups was developed by the Eppley Institute research team. The questions aimed to understand the level of use and contributors and barriers to use of park and recreation resources; to understand the perceived park and recreation resource needs; to identify connections between park and recreation resources and health; to identify tourism opportunities; and to identify partnership opportunities in the county and in the region. The questions were pilot tested by Eppley Institute staff for length, clarity, redundancy, and validity, and adjustments were made. Additionally, following the first focus group, two questions were combined, and two questions were added. A similar set of questions was developed by the Eppley Institute research team for the IDNR focus group, but these questions placed emphasis on use and opportunities pertaining to the IDNR sites in the Indiana Uplands region. A complete list of focus group questions can be found in Appendix E.

Focus Group Participants

Stakeholders were defined as individuals who represent the community as a result of their position, involvement, interest, influence, or identity in the community, and who maintain a primary residence in the county. The list of stakeholders for the focus groups was developed by the Center for Rural Engagement in conjunction with the Eppley Institute. The stakeholders were divided into two groups: (1) Community Ambassadors, which included commissioners, mayors, other municipal leaders, and CRE's partners, and (2) Local Resource Experts, which included economic, tourism, recreation, and park experts and leaders. Initial contact for the Community Ambassador group was made by the CRE via email. After the initial email, the Eppley Institute invited all the stakeholders to participate in a focus group. Two reminder emails were sent to the stakeholders; one approximately a week after the invitation and one on the day of the focus group.

Data Collection

The focus groups took place from October to December in 2018 between the hours of 4:00pm to 7:00pm. The first focus group (Owen County) ran for two hours; all subsequent focus groups lasted 90 minutes. The focus groups were conducted by two members of the Eppley Institute research team with participation from one CRE representative. The focus groups were conducted in a standardized format, using the focus group questions to guide conversation. The number of participants ranged in size from four for Brown and Owen Counties to 13 for Monroe County and 14 for the IDNR focus group. On average, there were approximately seven participants per focus group. Smaller focus groups are generally recommended since it is important for the researcher to be able to guide the conversation and keep the group focused (Morse & Richards, 2002), so the size of the groups worked well for the study. All focus groups were recorded in order to be able to accurately depict the perceptions of the participants.

Data Analysis

Ten of the focus group recordings were transcribed by the Eppley Institute research team and two were transcribed by Rev.com to increase the speed of the process. The transcriptions completed by Rev.com were checked by an Eppley Institute research team member for accuracy. Since the focus groups occasionally got off track, the focus group transcriptions were reviewed and re-organized by the Eppley Institute research team to ensure that answers aligned with the correct questions. Pre-defined codes were developed by the Eppley Institute research team prior to analysis to ensure consistency in coding across researchers. All focus group data analysis took place in NVivo 12, a widely used software for qualitative data analysis. Six different Eppley Institute research team members helped to code the data, and the research team lead reviewed all data analyses and made edits to ensure consistency.

APPENDIX B: COUNTY GIS WEBPAGES

Brown: <https://brownin.wthgis.com/>

Crawford: <https://beacon.schneidercorp.com/Application.aspx?ApplD=265&LayerID=3290&PageTypeID=1&PageID=1819>

Daviess: <https://daviessin.wthgis.com/>

Dubois: <https://duboisin.wthgis.com/>

Greene: <https://greenein.wthgis.com/>

Lawrence: <https://lawrencein.elevatemaps.io/>

Martin: <https://martinin.elevatemaps.io/>

Monroe: <https://monroein.elevatemaps.io/>

Orange: <https://orangein.elevatemaps.io/>

Owen: <https://owenin.elevatemaps.io/>

Washington: <https://washingtonin.wthgis.com/>

APPENDIX C: RECREATION FACILITIES SEARCH TERMS

| COUNTY GIS SEARCH TERMS | GOOGLE SEARCH TERMS |
|-------------------------|---------------------|
| camp | Aquarium |
| center | Aquatic Center |
| cemetery | Archery |
| cemetary | ATV |
| club | Barre |
| conserv | Baseball Diamond |
| course | Baseball Field |
| historic | Basketball Court |
| land trust | Basketball Hoop |
| museum | Beach |
| nature | Bowling Alley |
| theater | Boxing |
| theatre | Challenge Course |
| recreat | Community Garden |
| sport | Dance Studio |
| | Disc Golf Course |
| | Dog Park |
| | Escape Room |
| | Fitness Center |
| | Football Field |
| | Football Stadium |
| | Golf Courses |
| | Gym |
| | Gymnastics |
| | Ice Rink |
| | Ice Skating Rink |
| | Karate |
| | Karate School |
| | Karate Studio |
| | Kickboxing |
| | Lacrosse |
| | Laser tag |
| | Lazer tag |
| | Marina |
| | Martial Arts |
| | Martial Arts School |
| | Martial Arts Studio |
| | Mini Golf |
| | Miniature Golf |
| | Mountain Biking |
| | Movie Theater |
| | Movie Theatre |

| | |
|--|--------------------|
| | Museum |
| | Nature Center |
| | Paintball |
| | Pickleball |
| | Picnic Shelter |
| | Pilates |
| | Playground |
| | Pool |
| | Putt Putt |
| | Race Track |
| | Recreation Center |
| | Roller Rink |
| | Ropes Course |
| | Rugby |
| | Senior Center |
| | Shooting Range |
| | Skate Parks |
| | Soccer Field |
| | Softball Diamond |
| | Softball Field |
| | Splashpad |
| | Swimming Pool |
| | Tae Kwan Do |
| | Tae Kwan Do School |
| | Tai Chi |
| | Tennis Court |
| | Theater |
| | Theatre |
| | Theme Park |
| | Track |
| | Track and Field |
| | Volleyball Court |
| | Yoga Studio |
| | Zip Line |
| | Zoo |

APPENDIX D: RECREATION FACILITIES CATEGORIZATION FRAMEWORK

| | |
|--|-----------------------|
| AQUATICS | Bathhouse |
| | Diving Board |
| | Splashpad/Splash Park |
| | Swim Pool |
| | Wading Pool |
| | Water Park |
| | Waterslide |
| | Wave Pool |
| CULTURAL, EDUCATIONAL AND HISTORIC ATTRACTIONS | Art Attraction |
| | Cemetery |
| | Church |
| | Cultural Attraction |
| | Farm |
| | Garden (Greenhouse) |
| | Historic Attraction |
| | Mine |
| | Museum |
| | Natural Attraction |
| | Nature Center |
| | Seasonal Attraction |
| | Trail (Interpretive) |
| | Zoos & Aquariums |

| | |
|------------------------|--|
| ENTERTAINMENT | Amusement Park |
| | Arcade |
| | Billiard Table |
| | Bowling Alley |
| | Carnival Rides |
| | Casino |
| | Cinema |
| | Corn Maze |
| | Escape Room |
| | Fairground |
| | Games (Corn Hole, Horseshoe Pits, Shuffleboard) |
| | Haunted House |
| | Laser Tag |
| | Miniature Golf |
| | Music (Amphitheatre, Bandshell, Stage) |
| | Paintball Facility |
| | Racetracks (BMX, Car, Go Kart, Horse, Motocross) |
| | Roller Skating Rink |
| | Stadium |
| | Theaters (Comedy, Musicals, Plays) |
| RECREATION AND FITNESS | U-Pick Facility |
| | Virtual Reality |
| | Wineries, Breweries, & Distilleries |
| | Barre Studio |
| | Boxing Gym |
| | Cycling |
| | Dance Studio |
| | Exercise Equipment |
| | Gym |
| | Kickboxing Gym |
| | Martial Arts |
| | Pilates Studio |
| | Ping-Pong Table |
| | Playground/Playfield |
| | Recreation Center |
| | Skate Park |
| | Trails (Bike, Fitness, Hard Surface, Skating) |
| | Wall Court |
| | Yoga Studio |

| | |
|----------------------|--|
| GATHERING FACILITIES | Community Center |
| | Community Garden |
| | Dog Park |
| | Miscellaneous Facility |
| | Picnic Area |
| | Picnic Shelter |
| | Picnic Table |
| | Senior Center |
| HOSPITALITY | Conference Center |
| | Dump Station |
| | Food Concessionaire |
| | Lodging (Beach House, Cabin, Inn, Lodge) |
| | Multipurpose Facility |
| | Rental Facility |
| | Restaurant |
| | Restroom |
| | Shower |
| | Train |
| | Visitor Center |

| | |
|--------------------|---|
| OUTDOOR RECREATION | Access (Lake, River) |
| | Beach |
| | Bike Rental |
| | Boat Facility (Moor, Launch, Ramp, Rental, Service, Slip) |
| | Boating (Jet Skis, Motorboat, Sailing) |
| | Camp/Camping |
| | Challenge/Ropes Course |
| | Geographical Features (Cave) |
| | Fishing Facility (Cleaning, Pier) |
| | Fishing (Bank, Ice Fishing, Lake, River, |
| | Horse Rental |
| | Hunting Grounds |
| | Marina |
| | Motorized Recreation (ATV, ORV, Snowmobile) |
| | Open Space |
| | Swimming Spots (Lake, River) |
| | Trails (Hiking, Horse, Mountain Bike, Multi-Use, Nature) |
| | Water Recreation (Water Skiing, Wind Surfing) |
| | Winter Recreation (Sledding, Toboggan Run, Tubing) |
| | Zip Line |
| SPORTS | Batting Cage |
| | Equestrian Sports |
| | Field Sports (Baseball, Football, Lacrosse, Soccer, Softball) |
| | Golf/Disc Golf/Driving Range |
| | Gymnastics Center |
| | Horseshoe Pits |
| | Indoor Court Sports (Basketball, Volleyball) |
| | Outdoor Court Sports (Tennis, Pickleball) |
| | Rock Climbing Wall |
| | Running Track |
| | Shooting (Archery, Rifle, Skeet) |
| | |

APPENDIX E: FOCUS GROUP QUESTIONS

COUNTY FOCUS GROUP QUESTIONS

1. Do people visit parks, public lands, or trails in your county?
2. Which parks, public lands, or trails do you think are used most in your county?
3. What are your opinions on (physical) access (such as proximity or sidewalks) (or cost to get there or get in) to parks, public lands, and trails in your county?
4. What are your perceptions of safety of the parks, public lands, and trails in your county?
5. Do you perceive any barriers to people's use of parks, public lands, or trails in your county?
6. What do you perceive as motivators to people's use of parks, public lands, or trails in your county?
7. Should the county consider building or designating new parks, public lands, or trails? If so, what would be most useful?
8. Thinking about the region, are there any parks, public lands, or trails people use in the region?
9. Do you have any opinions regarding the parks, public lands, or trails in the region?
10. Do people use any recreation or leisure facilities or participate in recreation programs within your county?
11. What types of recreation or leisure facilities or programs do people use?
12. What are your opinions on (physical) access (such as proximity or sidewalks) (or cost to get there or get in) to recreation or leisure facilities and programs in your county?
13. What are your perceptions of safety of the recreation or leisure facilities and programs in your county?
14. Do you perceive any barriers to people's use of the recreation and leisure facilities and programs in your county?
15. What do you perceive as motivators to people's use of the recreation and leisure facilities and programs in your county?
16. What types of recreation or leisure facilities and programs would people like to have in the county?

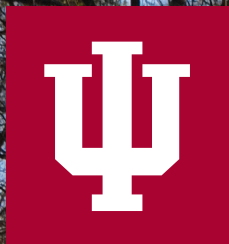
Indiana Uplands

17. Are there any recreation or leisure facilities or programs people use in the region?
18. Do you have any opinions regarding the recreation or leisure facilities in the region?
19. In what ways do you think parks and recreation can improve the community's health?
20. Are there any additions or changes to parks and recreation resources in your county that could be made to improve the community's health?
21. If you were in charge of parks and recreation in your county what would you do the same or differently?
22. What do you perceive as opportunities for tourism in your county?
23. What do you perceive as opportunities for tourism in the region?
24. Do you feel there are facilities, programs, or events that could be developed that would better draw tourists to the county?
25. Do you feel there are facilities, programs, or events that could be developed that would better draw tourists to the region?
26. Are there any partnership opportunities that you feel would benefit the community's health, economy, or overall quality of life in the county or region?

DEPARTMENT OF NATURAL RESOURCES FOCUS GROUP QUESTIONS

1. Do people visit the state lands, lakes, and trails in the Indiana Uplands region (defined as the 11 counties on your fact sheet)?
2. Which state lands, lakes, and trails do you think are used most in the Indiana Uplands region?
3. What are your opinions on access (such as proximity or cost to get there or get in) to the state lands, lakes, and trails in the Indiana Uplands region?
4. What are your perceptions of safety of the state lands, lakes, and trails in the Indiana Uplands region?
5. Do you perceive any barriers to people's use of the state lands, lakes, and trails in the Indiana Uplands region?
6. What do you perceive as motivators to people's use of the state lands, lakes, and trails in the Indiana Uplands region?
7. If new state lands, lakes, or trails were to be designated in the Indiana Uplands region, what would be most useful and why?

8. Do people use any recreation or leisure facilities or participate in recreation programs within state lands, lakes, and trails in the Indiana Uplands region?
9. What types of recreation or leisure facilities or programs do people use?
10. Do you perceive any barriers to people's use of the recreation and leisure facilities and programs within state lands, lakes, and trails in the Indiana Uplands region?
11. What do you perceive as motivators to people's use of the recreation and leisure facilities and programs within state lands, lakes, and trails in the Indiana Uplands region?
12. Does the Department of Natural Resources or your specific site host any recreation and leisure programs that aim to improve the community's health, economy, or overall quality of life?
13. What has worked with these programs and what has not? Why?
14. What types of recreation or leisure facilities and programs would visitors like to have in the Indiana Uplands region?
15. In what ways do you think state lands, lakes, and trails can improve the community's health?
16. Are there any additions or changes to state lands, lakes, and trails that could be made to improve the community's health?
17. What do you perceive as opportunities for tourism relating to the state lands, lakes, and trails in the Indiana Uplands region?
18. What do you perceive as opportunities for tourism in general in the Indiana Uplands region?
19. Do you feel there are facilities, programs, or events that could be developed that would better draw tourists to the Indiana Uplands region?
20. Does the Department of Natural Resources or your specific site participate in any partnerships that aim to improve the community's health, economy, or overall quality of life?
21. What has worked with these partnerships and what has not? Why?
22. Are there any partnership opportunities that you feel would benefit the community's health, economy, or overall quality of life in the region?



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